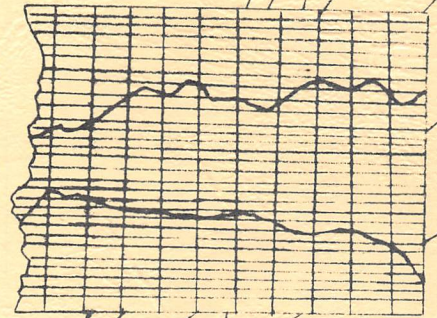
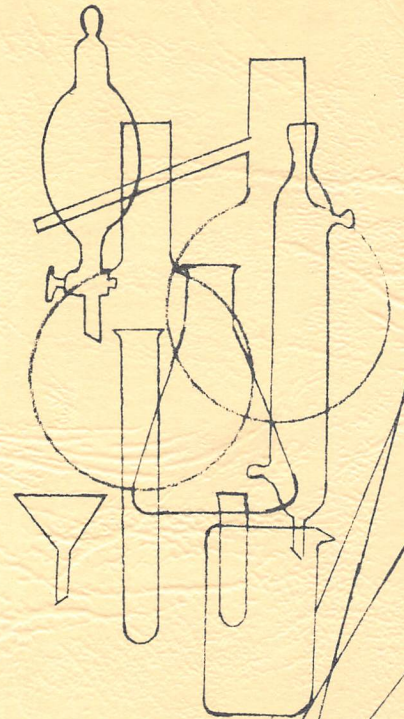


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**PALM BEACH COUNTY, FLORIDA**  
**AIR POLLUTION CONTROL PROJECT**  
**ENVIRONMENTAL PROTECTION AGENCY**  
**GRANT NO. 70C-1102 RI**

**ANNUAL PROGRESS REPORT**

**APRIL 1, 1970 - MARCH 31, 1971**



**PALM BEACH COUNTY HEALTH DEPARTMENT**

**For Reference**

**Not to be taken from this room**



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## 1.0 INTRODUCTION

Palm Beach County continues to be a part of the rapidly growing Southeast Florida metropolitan area. The 1970 census reveals a continuing rapid growth in all three (3) of the major Counties in the area. Dade, Broward, and Palm Beach County now contain 2.2 million people, an increase of forty eight (48) percent over the decade of the sixties.

Continuous rapid growth has been recorded in Palm Beach County for the past 50 years. At the time of the 1910 Census, it had a population of 5,577 and ranked 39th among the counties of the State. Ten (10) years later the County had climbed to 17th position. By 1930 it was the 7th largest, a position it held until the 1960 Census. Today it holds the 6th position. The table below shows the population growth of the County since it was first recorded in the 1910 Census. It is interesting to note that in every decade but one (1940-1950) the County had a greater percentage increase than the State.

PALM BEACH COUNTY POPULATION GROWTH, 1910-1970

Year	Total Population	Per Cent Increase Over Previous Census	
		County	State
1970	345,553	51	35
1960	228,106	99	79
1950	114,688	43	46
1940	79,989	54	29
1930	51,781	178	52
1920	18,654	234	29
1910	5,577		



As noted, Palm Beach County's population increased 51% to a total of almost 350,000 in the 1970 Census. The major source of population growth in the County since 1950 is in migration of families and individuals. This source of growth accounted for about 87 percent of the total with natural increase--difference between births over deaths--accounting for the remaining 13 percent.

The population distribution within the County presents an unusual pattern. Although Palm Beach County is the third largest county in land area (2,230 square miles), virtually all the population is located in two relatively small areas. One area is a narrow band adjacent to the east coast and the other is a narrow band adjacent to Lake Okeechobee.

The band adjacent to the east coast contains more than 90 percent of the County's population. This area includes such cities as Riviera Beach, West Palm Beach, Palm Beach, Lake Worth, Boynton Beach, Delray Beach, and Boca Raton. The economy of this area is largely affected by the tourist industry.

The other populated area, adjacent to Lake Okeechobee, contains virtually all of the remaining 10 percent of the County's population. This area includes such communities as Belle Glade, Pahokee, Chosen, Belle Glade Camp, and South Bay. In contrast to the economy of the east coast, the economy of this area is based on agriculture, principally winter vegetables and sugarcane.



In recent decades, the population distribution within the County has undergone significant changes.

Forty years ago, the U. S. Bureau of the Census recorded a total County population of 51,781. The larger coastal municipalities in the County--Lake Worth, Lantana, West Palm Beach, and Palm Beach--contained 34,439 persons or 66.5 percent of the total County population. During the following two decades these areas continued to contain in excess of 50 percent of the total County population. At the time of the 1960 Census, this percentage had dropped to 38.5 and again to 27.7 percent in the 1970 Census. These statistics clearly indicate that in the last two decades the urban unincorporated areas have increased in population at a much greater rate than the remainder of Palm Beach County. Today, almost 100,000 residents of Palm Beach County live in urban, unincorporated areas. The 38 municipalities and a scattering of people living in rural areas make up the remainder of the population. The table below shows the 1970 U. S. Census enumeration for municipal entities in the County.



TABLE NO. 1  
PALM BEACH COUNTY, FLORIDA  
POPULATION

	U.S. CENSUS 4/1/60	U.S. CENSUS 4/1/70
Tequesta	199	2,642
Jupiter	1,058	3,136
Jupiter Inlet Colony	242	396
Juno Beach	249	747
Palm Beach Gardens	1	6,102
North Palm Beach	2,684	9,035
Lake Park	3,589	6,993
Riviera Beach	13,046	21,401
Palm Beach Shores	885	1,214
Mangonia Park	594	827
West Palm Beach	56,208	57,375
Palm Beach	6,055	9,086
Golfview	131	201
Haverhill	442	1,034
Royal Palm Beach	11	475
Cloud Lake	148	136
Glenridge	226	216
Lake Clarke Shores	1,297	2,328
Palm Springs	2,503	4,340
Greenacres City	1,026	1,731
Lake Worth	20,758	23,714
Atlantis	2	425
Lantana	5,021	7,126
South Palm Beach	113	188
Manalapan	62	205
Hypoluxo	114	336
Boynton Beach	10,467	18,115
Ocean Ridge	209	1,074
Golf	35	50
Gulfstream	176	408
Briny Breezes	223	481
Delray Beach	12,230	19,366
Highland Beach	65	40
Boca Raton	6,961	28,506
University Park	13	1,032
Pahokee	4,709	5,663
Belle Glade	11,273	15,949
South Bay	1,631	2,958
Total Incorporated Area	164,656	255,051
Unincorporated	63,450	93,702
Total	288,106	348,753



Palm Beach County continues to be an important part of the Miami economic market area, the largest in the State. This area has shown the greatest increase in growth in the 1950-1970 period of any of the five (5) state market areas. This growth has been projected to continue for the next twenty years in population, tourism, non-agricultural employment, disposable income, personal expenditures, retail sales, and in savings and deposits. Major industries of the County continue to be sugarcane processing, tourism, aircraft engines, electronics manufacturing, oceanography, construction, and the service industries.

The complexity of the problems involved in keeping abreast of the environmental protection needs as related to air pollution control in Palm Beach County have been illustrated by a brief profile of the area. Indeed, it is characteristic of urban areas across the nation. In response to these demands, a wide variety of activities have been carried out by the program in the last twelve (12) months. Other significant achievements were the implementation of previously established objectives.

At the time of the submission of last's years Annual Progress Report, a County Environmental Control Act was being considered by the Palm Beach County Legislative Delegation. The Act passed in the 1970 Legislative Session and became law on July 1, 1970. A brief description of the Act and its' implementation follows in another section of the report.



Another significant development for the Palm Beach County Air Pollution Control Program was the adoption of a permit system by the Department of Air and Water Pollution Control of the State of Florida. It is anticipated that as local administrator of the permitting system, this Agency's Air Pollution Control Program will be able to abate illegal conditions on a "preventive" rather than "corrective" basis. The permit system as now exists in Florida requires permitting of any article, machine, equipment, contrivance, operation, process or activity which the Department shall determine does cause the issuance of air contaminants in sufficient quantity, with respect to its character, quality or content, and the circumstances surrounding its location, use and operation, as to contribute significantly to the pollution problems within the State. Accordingly, the Department requires both a permit to construct and a permit to operate new sources and only a permit to operate existing sources. The registration of sources through this system has yielded valuable inventory and engineering review data.

During the last three months of the report period the South Florida area has experienced a record drought. The National Weather Service's West Palm Beach Station recorded a total precipitation of 2.45 inches during this three month period or 3.82 inches less than the normal average rainfall. As result of this extended drought which was accompanied by low relative humidities and high temperatures, a total of 366 fires were recorded by the Division of Forestry in Palm Beach, Broward and Dade Counties. These fires accounted for the destruction of 217,000 acres of brushland, muckland, pastureland and miscellaneous agricultural lands. Fires at six



locations--each in excess of 35,000 acres--were responsible for a large percentage of total acreage destroyed. The Division of Forestry reports that during this drought period the fire buildup index remained greater than the critical value of 60 with values as high as 170. Likewise, the fire spread index remained greater than the critical value of 30 more than 70 percent of the time.

As a result of these fires and westerly winds which frequently occurred during this period, the urban areas of South Florida experienced incidences of smoke and haze. Although it is not possible to ascertain the economic value of the damage incurred as a result of air pollution related to this source, it is generally recognized that in some instances irreparable damage occurred to wildlife habitat. Increased building and personal property maintenance costs have been reported by individuals and establishments in the area and hospital records indicate substantial increase in admissions of persons with respiratory ailments.

Suspended particulates as measured by the high volume filter monitoring network were excellent indicators of the gravity of the situation during the drought period.

The air quality monitoring capabilities of the local program continue to be enhanced through the installation of new total hydrocarbon and carbon monoxide analysis systems in the mobile air monitoring laboratory.

Efforts on the National and State level in bringing pollution programs to the public eye and involving the citizen



in environmental decisions through proper channels have been augmented locally.



## 2.0 LOCAL LEGISLATION

The Palm Beach County Environmental Control Act is of far-reaching significance to the Palm Beach County Air Pollution Control Program as it provides for control of the total environment and adopts all of the rules and regulations of the Florida Department of Air and Water Pollution Control and the Florida Division of Health. The Act established (1) a rule-making board known as the "Environmental Control Board" which comprises the Board of County Commissioners, ex officio; (2) an environmental control officer with broad powers to seek legal enforcement; (3) an Environmental Control Hearing Board to hear appeals and issue abative orders; and (4) an annual fee service assessment schedule,

The Act essentially supports the ongoing program by filling the void that existed for many years in the lack of a legal resource for enforcement of the regulations. The Act provides broad powers for the environmental control officer, allowing at his option, prosecution in criminal court by referral to the county solicitor, injunction through the circuit court in matters of emergency, and action before the Palm Beach County Environmental Control Hearing Board in cases of non-compliance with violation notice and order by the environmental control officer.

The act provides for a representative membership on the Environmental Control Hearing Board as follows:

- (1) One (1) member is to be a lawyer,  
recommended to the Board by the  
representative of the Florida Bar  
Association.



(2) One (1) member is to be a doctor of medicine recommended to the Board by the Palm Beach County Medical Society.

(3) One (1) member is to be an engineer, recommended to the Board by the local chapter of the Palm Beach Chapter of Florida Engineering Society.

(4) Two (2) members are to be discreet citizens not holding elective office and; the act also provides that the five (5) members of the Environmental Control Hearing Board be initially appointed as follows: One (1) member shall be appointed for the term of one (1) year. One (1) member shall be appointed for the term of two (2) years. Three (3) members shall be appointed for the term of three (3) years, and thereafter all appointments shall be made for the term of three (3) years.

On November 3, 1970, the following persons were appointed as members of the Palm Beach County Environmental Control Hearing Board for the following terms:

Dr. William E. Anspach, Jr.	For a term of 1 year
Jacob M. Boyd, P.E.	For a term of 2 years
Kenneth Beal, Attorney	For a term of 3 years
Robert Hope	For a term of 3 years
Phillip D. "Bill" Lund	For a term of 3 years



As result of action taken by the Board of County Commis-  
sioners at their meeting of September 22, 1970, Mr. Lawrence  
D. Lukin, Director of Environmental Services, Palm Beach  
County Health Department, was appointed Environmental Control  
Officer.



### 3.0 COMPLAINTS

During the period April 1, 1970, through March 31, 1971, a total of 153 complaints dealing with air pollution were received by this office. These can be classified as follows:

1. Industrial Fumes or Dust	21
2. Commercial Incinerators	49
3. Open Burning	48
4. Internal Combustion Fumes or Exhaust	5
5. Steam-Electric Utility Emissions	6
6. Dry Cleaning Fumes or Smoke Emissions	5
7. Sewage Treatment Plant Odors	2
8. Food Establishment Odors	4
9. Pollen Deposits	2
10. Unknown Sources	11
<u>TOTAL</u>	153

During this specific report period, two source types produced two-thirds of all complaints. Commercial incinerators continue to be the most prevalent type of complaint; however, this figure is 20% fewer than similar complaints received during the preceding report period. The percentage of open burning complaints doubled as compared to the previous year. Approximately three-fourths of the complaints in the open burning category were the result of wild fires. An unusually dry period contributed to the frequency of these fires. The remainder of this category consisted of burning land clearing waste and refuse.



Complaints concerning industrial fumes or dust originated from residential areas adjacent to abrasive blasting operations, concrete plants and construction projects. Recommendations, in each case, were made to the responsible parties to reduce the cause of the complaint,

A malfunctioning boiler precipitated six (6) complaints. Several repairs have been made on the unit but continuing complaints necessitate periodic surveillance of the unit.

Internal combustion fumes or exhaust accounted for five (5) complaints. Several of these complaints involved diesel fumes while the remainder dealt with various repair operations.



#### 4.0 TRAINING

Air Pollution Control personnel attended training courses as follows:

Maurice J. Hall, Engineering Technician I, attended a NAPCA course, "Visible Emissions Evaluation", in Winter Haven, June 16-18.

Frank J. Gargiulo, Sanitary Engineer III, attended "Control of Particulate Emissions". NAPCA Course # 413 in Austin, Texas, January 11-15.

Frank J. Gargiulo attended "Air Quality Management", NAPCA Course # 422, Research Triangle Park, North Carolina, February 15-19.



5.0 EQUIPMENT PURCHASE

The major items of equipment purchased during the reporting period are as follows:

- 5.1 One (1) Blue M Laboratory Oven
- 5.2 One (1) Tudor Model C, all-glass, water still.
- 5.3 One (1) Dickson Minicorder from General Metal Works High Volume Air Samplers



## 6.0 ENGINEERING REVIEWS

During the report period the program reviewed various engineering matters and acted on same as follows:

- 6.1 I T & T Semiconductors, 3301 Electronics Way, West Palm Beach, Florida, requested preliminary engineering review of packed tower scrubber for miscellaneous acid processes for permit submittal.
- 6.2 I T & T Semiconductors, 3301 Electronics Way, West Palm Beach, Florida, requested and received approval for the installation of acid process vent system with packed tower scrubber.
- 6.3 Applications for DAWPC permits to operate incinerators were forwarded to 22 firms and institutions which operate 64 incinerators in Palm Beach County. At the closing of this report, 46 applications had been reviewed, and 30 of these were recommended for permitting.
- 6.4 At the request of Palm Beach County's engineering department, this office recommended specifications for an auto salvage incinerator to Municipal Salvage Corporation.
- 6.5 Applications for permits to operate air pollution sources were forwarded to 39 establishments operating 102 sources in Palm Beach County, to one establishment operating 7 sources in Hendry County, and to one establishment



operating 4 sources in Glades County. Although the latter two establishments are located outside the Program's area of jurisdiction, the review was performed as a courtesy to the DAWPC's regional engineer--these two (2) sources complete a list of nine (9) sugar mills in South Florida; seven (7) of which are located in Palm Beach County. At the closing of this report, 92 applications had been reviewed: 45 of these were recommended for permitting and 47 for temporary permitting.



## 7.0 PUBLIC RELATIONS

Some of the more important presentations to local organizations or the general public concerning the problems of air pollution and the local air pollution control program were as follows:

- 7.1 Earth Day presentations on April 22, 1970 included addresses by J. H. Cooper on air pollution problems in Palm Beach County to the Riviera Beach Adult Education Center and Palm Beach Junior College.
- 7.2 On April 24th., J. H. Cooper participated with Stephen Lloyd on a "talk show", station WJNO, to discuss air pollution problems in Palm Beach County.
- 7.3 J. H. Cooper addressed the Kiwanis Club of West Lake Worth on May 18, 1970 on the subject of "Air Pollution in Palm Beach County".
- 7.4 J. H. Cooper spoke before the Downtown Civitan Club on July 2, 1970, "Air Pollution in South East Florida".
- 7.5 J. H. Cooper gave a short lecture before the Adult Education Science/Conservation class at the Bazaar Plaza, on July 17.
- 7.6 J. H. Cooper spoke before the Palm Beach County Nurserymen's Association on July 21, on "Air Pollution-Its Effects and Control".
- 7.7 J. H. Cooper spoke in behalf of the DAWPC before a meeting of the Southeast Florida Air Quality Council in Fort Lauderdale on September 1. The topic was the proposed air quality standards for Southeast Florida.



- 7.8 J. H. Cooper spoke before the Lantana Rotary Club on September 14. The topic was "Air Pollution Control in Palm Beach County".
- 7.9 On October 19, J. H. Cooper attended a meeting of the Palm Beach Gardens Town Council to enforce the adoption of an air pollution control ordinance.
- 7.10 J. H. Cooper addressed the Lake Worth Rotary Club on October 21 concerning environmental control.
- 7.11 On October 29, Shirley Field addressed a public health nurses orientation class on air pollution control in Palm Beach County.
- 7.12 Frank J. Gargiulo attended Sugar Harvesting Day on February 10, 1971.



## 8.0 ENFORCEMENT

Enactment by the State Legislature of Chapter 70-862, FAC, creating the local Environmental Control Board, has brought enforcement procedures to the local level. Ordinance 70-5 adopted all State Pollution Control Acts and implemented local enforcement.

Chapter 17-4, FAC, established a State permit system for all pollution sources and will become an enforcement tool in the coming year.

Formal enforcement action in which this Agency has been involved during the report period include:

8.1) On April 8, 1970, J. H. Cooper and C. C. Rhodes, Jr., met with the County Engineer to discuss details regarding alternatives to further use of the Jupiter Dump for solid waste disposal. On April 20, 1970, Mr. J. H. Cooper and C. C. Rhodes attended a meeting with representatives of the North County Municipalities to discuss retirement of this Dump. This office subsequently announced the official closure of the Jupiter Dump as of June 1, 1970.

8.2) On April 10, 1970, a meeting was held with Mr. Lawrence E. Cusick, representing Walden Paint Company, to discuss methods to control particulate emissions from sand blasting operations.



- 8.3) A formal request for citation of Rubin Construction Company for violation of Chapter 28-7.06 (2) (b) to the Air and Water Pollution Control Commission, Tallahassee, on April 23, 1970.

On May 14, 1970, the Department of Air and Water Pollution Control issued a Notice and Order to Rubin Construction Company to show cause why the plant should be allowed to continue operating in direct violation of the State's air quality standards, and to further show cause why it should not be ordered to start immediately the construction of approved air pollution control devices for the asphalt plant. Date set for the hearing was May 26, 1971.

Date of hearing was subsequently postponed and rescheduled to May 28, 1970. On May 27, 1970, word was received from the Department that the public hearing scheduled for May 28, 1970, had been postponed indefinitely.

This facility is now being retested to determine its status under the State permit system.

- 8.4) On June 8, 1970, the Florida Department of Air and Water Pollution Control issued a Notice of Violation of Department Rule 28-7.06 (1) (a) (b) to Florida Power and Light Company, Riviera Station, based on reports of stack



monitoring forwarded from this office to the Department on December 30, 1969. (Copy of this report was included in the 1970 Annual Report). Respondent was given twenty (20) days in which to engage in informal conference with Department staff members in the Bureau of Enforcement.

A conference was held on July 2, 1970, at which representatives of the power company satisfied the Department that the violations recorded were of the incident type and purely operational and that no corrective installation or additional mechanical controls could prevent recurrences of this type violation.

The Department requested information concerning (1) Natural gas supply-contracted and interruptable-allocated to the nine (9) Florida Power and Light Stations (2) the basis of the allocations of available gas. Upon receipt of this information, the Department ordered the close-out and dismissal of this case on August 28, 1970.

This office continues to recommend that the Riviera Station be ordered to utilize no less than 60% natural gas as part of the total fuel during any monthly period.



Daily monitoring of the visible emissions from the Riviera station for four (4) hour periods was again performed during the period from October 26, 1970, to November 6, 1970.

Ringlemann and equivalent opacity observations of stacks for Units #3 and #4 of the Riviera Beach Station were initiated on October 26, 1970. Observation periods were of four (4) hour duration, atmospheric visibility permitting. Afternoon plume density readings beginning at 1:00 p.m. were recorded October 26, 27, 28, 29, and 30. Morning plume density readings beginning 8:30 a.m. were recorded November 2, 3, 4, 5, and 6.

Smoke opacity readings were recorded for each stack. Continual readings at fifteen (15) second intervals were made for five (5) minute periods. This procedure was repeated on each quarter hour for a total time period of approximately four (4) hours. Unusual emissions from either stack in between scheduled readings were noted.

Ringlemann numbers were recorded for black or gray plumes. Equivalent opacity readings were recorded for all other colors including



white. The angles of the sun's rays for this area were obtained from the Planetarium and Science Museum of Palm Beach County. Wind speeds and directions were obtained from the United States Weather Bureau, Palm Beach International Airport.

Observer position was changed during the observation periods to adjust to changing sun's ray angles and wind direction.

Weather conditions affecting visibility or light contrast during the hours of observation were recorded.

Emissions from Units #3 and #4 were considered as a single air pollution source in calculation of periods of violation. Opacity of the emissions from each stack were recorded on an individual basis, but emissions in excess of allowable limits from either stack were considered to constitute a violation.

Half hour periods for calculation of violation incidents began on the hour and half hour. Violations would be noted if readings



of greater than Ringlemann 2 or 40% opacity were recorded during the half hour so defined or if more than twelve (12) readings of Ringlemann 2 or 40% opacity were recorded.

There were no periods of violation on the basis of Ringlemann readings for Units #3 and #4. All of the visible emission violations for these units occur as equivalent opacity.

A total of 785 zero readings were recorded during the period of observation. These are not included on the histograms because of the difficulty involved in assigning them to opacity totals.

Comparison of periods of violation as recorded for morning versus afternoon is noteworthy. Plant emissions were in violation 32% of the morning observation periods whereas the plant was in violation only 10% of the afternoon periods.

The equivalent opacity observations speak for themselves. Violations of Chapter 28-7.06 (1) (a) and (1) (b) occur intermittently.



Violations of Chapter 28-7.06 (1) (b) occurred for a total of 21.2% during the observation periods. This represents a 17.6% decrease in observed violations as compared to the 1969 survey.

8.5) On June 24, 1970, this office forwarded to the Department of Air and Water Pollution Control a request for citation of Publix Supermarket, Inc., for smoke emissions in violation of Department Rule 28-7.06 (1) (a) (b). Said violations were related to the operation of an incinerator located at the Publix Market, Lantana, Florida. On August 27, 1970, the Department issued formal Notice of Violation and offered the respondent twenty (20) days in which to engage in informal conferences. The unit was voluntarily closed by the Company's management on September 11, 1970.

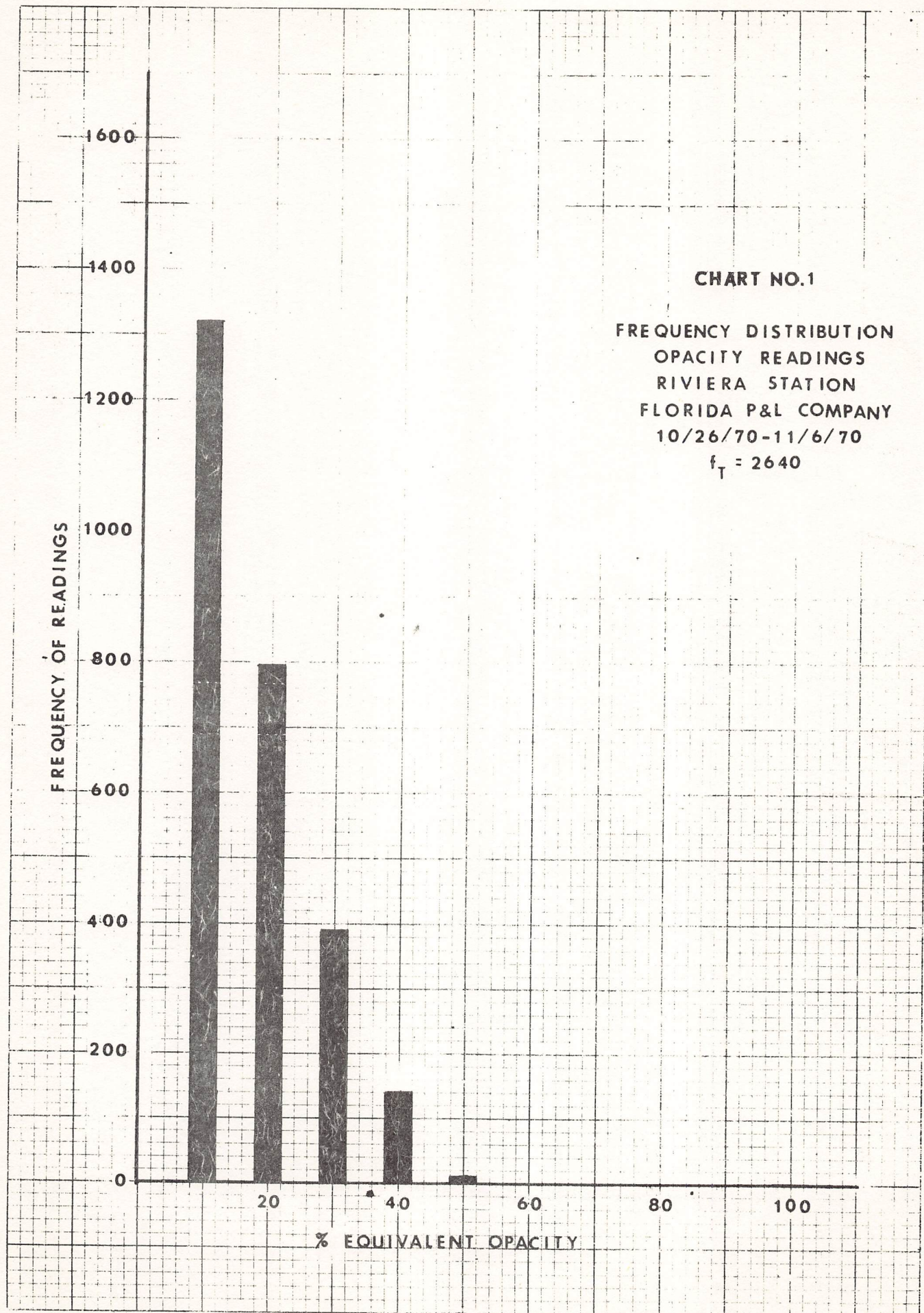
8.6) On July 1, 1970, formal Notice of Violation of Chapter 28-7.06 (1) (a) (b) was sent to the management of Winn-Dixie/Kwik Chek Stores concerning



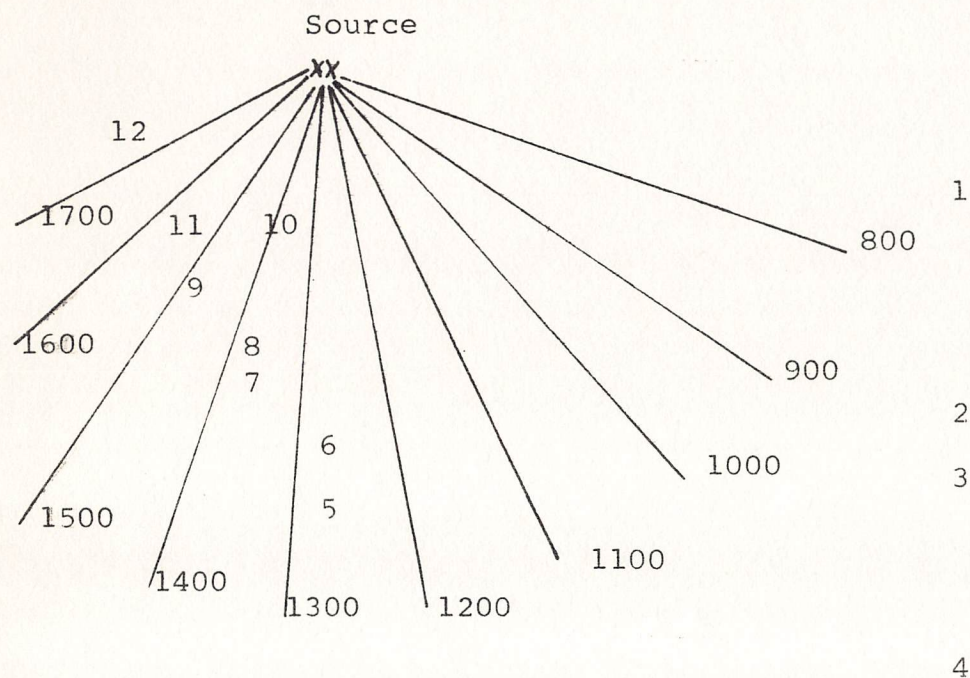
Table 2  
SUMMARY CHART  
RINGLEMANN-OPACITY VIOLATION  
RIVIERA STATION  
10/26/70-11/6/70

OBSERVATION PERIOD	RINGLEMANN VIOLATION	EQUIVALENT OPACITY VIOLATION	TOTAL VIOLATION	TOTAL OBSERVATION	PERCENT VIOLATION
MORNING	0	6.5 hrs.	6.5 hrs.	20 hrs.	32.5
AFTERNOON	0	2.0 hrs.	2.0 hrs.	20 hrs.	10.0
TOTAL	0	8.5 hrs.	8.5 hrs.	40 hrs.	21.2









<u>Observation point</u>	<u>Direction from source</u>	<u>Distance from source</u>
1	111° N	0.9 mi.
2	124	1.0 mi.
3	126	1.1 mi.
4	136	1.25 mi.
5	198	0.4 mi.
6	200	0.35 mi.
7	216	0.3 mi.
8	223	0.3 mi.
9	238	0.3 mi.
10	242	0.2 mi.
11	247	0.3 mi.
12	268	0.25 mi.

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OBSERVER LOCATION - SUN'S AZIMUTH  
 RINGLEMANN SURVEILLANCE-1970  
 RIVIERA STATION  
 FLORIDA POWER & LIGHT CO.  
 Figure 1



emissions from an incinerator located at Camino Square, Boca Raton. The unit was voluntarily closed and no further action was required.

- 8.7) A meeting was held on August 24, 1970, between representatives of the City of Boynton Beach and this office regarding illegal operations at the City Dump. The City was requested to furnish this office within 90 days with engineering plans for solid waste disposal at this site and to take immediate steps to cease and prevent open-burning and provide cover for garbage deposited at the site.

On December 18, 1970, formal Notice of Violation of the Palm Beach Environmental Control Ordinance 70-5, Section 2, Chapters 10D-12.07 (1) (b), (2) (d) (e) (f) (g) (h) (j) and 17-2.05 (1) (a) (b) FAC was served on city officials of Boynton Beach.

Engineering plans for operation of the site as a sanitary landfill were received by this office on January 25, 1971.



These plans were reviewed and approved with provisos. Surveillance is continuing to evaluate landfill management.

- 8.8) Formal Notice of Violation of Chapter 28-7.06 (1) (a), FAC, was served on the City of Boca Raton on October 22, 1970. Specific cause of violation was open-burning of trash at the Boca Raton Trash Dump. A meeting was held on November 10, 1970, between representatives of the City of Boca Raton and this office to formulate plans for an acceptable solid waste disposal plant by the City of Boca Raton. A fire prevention program was initiated, security of the Dump was improved, and plans formulated for proper closure of this Dump. On January 26, 1971, the City of Boca Raton entered into an agreement with a private sanitation company to receive, compact and transport all trash and garbage to a county dump. The City then proceeded with closure of both the trash and garbage dumps.
- 8.9) A meeting was held in the Palm Beach County Health Department between representatives of the sugar industry, and local and State Pol-



lution Control Department members to discuss the permit system on October 30, 1970.

8.10) On December 2, 1970, formal Notice of Violation of Palm Beach County Environmental Control Ordinance 70-5, Section 2, Chapter 17-2.05, (1) (a) (b), FAC, was served on Municipal Salvage Corporation for smoke emissions from the open-burning of automobile parts. A meeting was held on December 11, 1970, with a representative of the County Engineer's office and members of this office to discuss alternatives to continued open-burning. Continuing smoke emissions in violation of State standards resulted in issuance on January 14, 1971, of an order to show cause and notice of hearing by the Palm Beach County Environmental Hearing Board. This case was heard by the Board on February 28, 1971, and resulted in the Board finding the respondent in violation and the ordering that all burning at the site of Municipal Salvage to be immediately ceased and prevented.

8.11) Formal Notice of Violation of the Palm Beach County Environmental Control Ordinance, Section 2, Chapter 17-2.05 (1) (a) (b) was sent to Publix Supermarket, Inc., on December 16, 1970.



Action rose out of smoke emissions from an incinerator located at the Publix Market, Camino Square, Boca Raton. Notice of Violation was acknowledged by the Publix Supermarket, Inc. management and this unit voluntarily closed as of December 21, 1970.

8.12) On February 17, 1971, formal Notice of Violation of the Palm Beach County Environmental Control Ordinance, Section 2, Chapter 17-2.05 (1) (a) (b) on Publix Supermarket, Inc. The violation cited concerned smoke emissions from an incinerator located at the Publix Market in Tequesta, Florida. Continuing violations resulted in issuance of notice of non-compliance by the Environmental Control Officer on March 15, 1971.

8.13) Formal Notice of Violation of Palm Beach Environmental Control Ordinance 70-5, Section 2, Chapter 17-2.05 (1) (a) (b) was served on Precision Casting, Inc., on March 25, 1971. At the time of notification of violation, a meeting was scheduled with representatives of the subject firm and members of this office to discuss programs to bring the emissions from this operation into conformity with State standards.



8.14) The annual inspection of incinerators was carried out during August and September of 1970. Recommendations for repairs, routine maintenance, and improved operational procedures were forwarded to the responsible parties.



TECHNICAL STUDIES

## 9.1) Introduction

The following routine analysis were performed during the reporting period.

## Suspended Particulate (Daily/Monthly)

Total Gravimetric

Benzene Soluble Organics

Sulfates

Nitrates

## Dustfall (Monthly)

Combustion loss

Soluble

Insoluble

## Fluorides (Quarterly)

Vegetation

## Dustfall (Periodic)

## Microscopic Morphology

Ambient air sampling for particulate matter at the eight permanent monitoring stations and quarterly sampling of vegetation in the vicinity of Pratt & Whitney, and microscopic morphology of dustfall samples have continued as described in previous annual reports.

Gaseous sampling for total oxidants, nitrogen dioxide and sulfur dioxide is now underway. Equipment to expand gaseous sampling to include hydrocarbons and carbon monoxide is being installed and tested.



Further details on major technical studies are provided below.

9.2) Permanent Monitoring Network

The Palm Beach County permanent air monitoring network continues in operation. Tabulated results for the year 1970 appear in Tables #3, #4, and #5. Table #3 shows results of suspended particulate monitoring. The Belle Glade station recorded the highest mean, maximum and minimum concentrations. Concentrations recorded during this report period do not vary significantly from those recorded for the 1969 report period.

Monthly average contents of the suspended particulate samples are shown in Table #4. Seasonal highs and lows for all parameters are again apparent. The atypical pattern for concentrations for organics and sulfates at the North Palm Beach station noted in last years report is reduced in this period. A similar but less pronounced effect is recorded at the West Palm Beach station.

The maximum suspended particulate sample recorded at the Belle Glade station occurred in March of 1970, and is related to the burnings of cane fields in the vicinity of



the sampler. The maximum recorded at the Lake Worth station was in December, 1970, during a period of heavy smoke concentrations throughout the area. The Forestry Service indicates that major brush fires had destroyed 11,125 acres during the two week period preceding the sample. This station, with a high background level from the smoke was also affected by the dust generated by the unloading of a truckload of lime at the water treatment plant.

The maximum recorded of 1970 in West Palm Beach in January probably reflects high concentrations of salt aerosols produced during a period of high north, northeasterly winds.

Dustfall concentrations for the year 1970 are shown in Table #5. Royal Palm Beach shows the highest mean concentration in all categories. This may be the result of extensive land clearing and road building in the area of the sampling station.

Other stations have remained relatively stable since the last report period.



Chart # 2 shows a range of probable values for suspended particulate concentration based on 1970 data. Chart # 3 is the wind rose for the county for the 1970 calendar year.

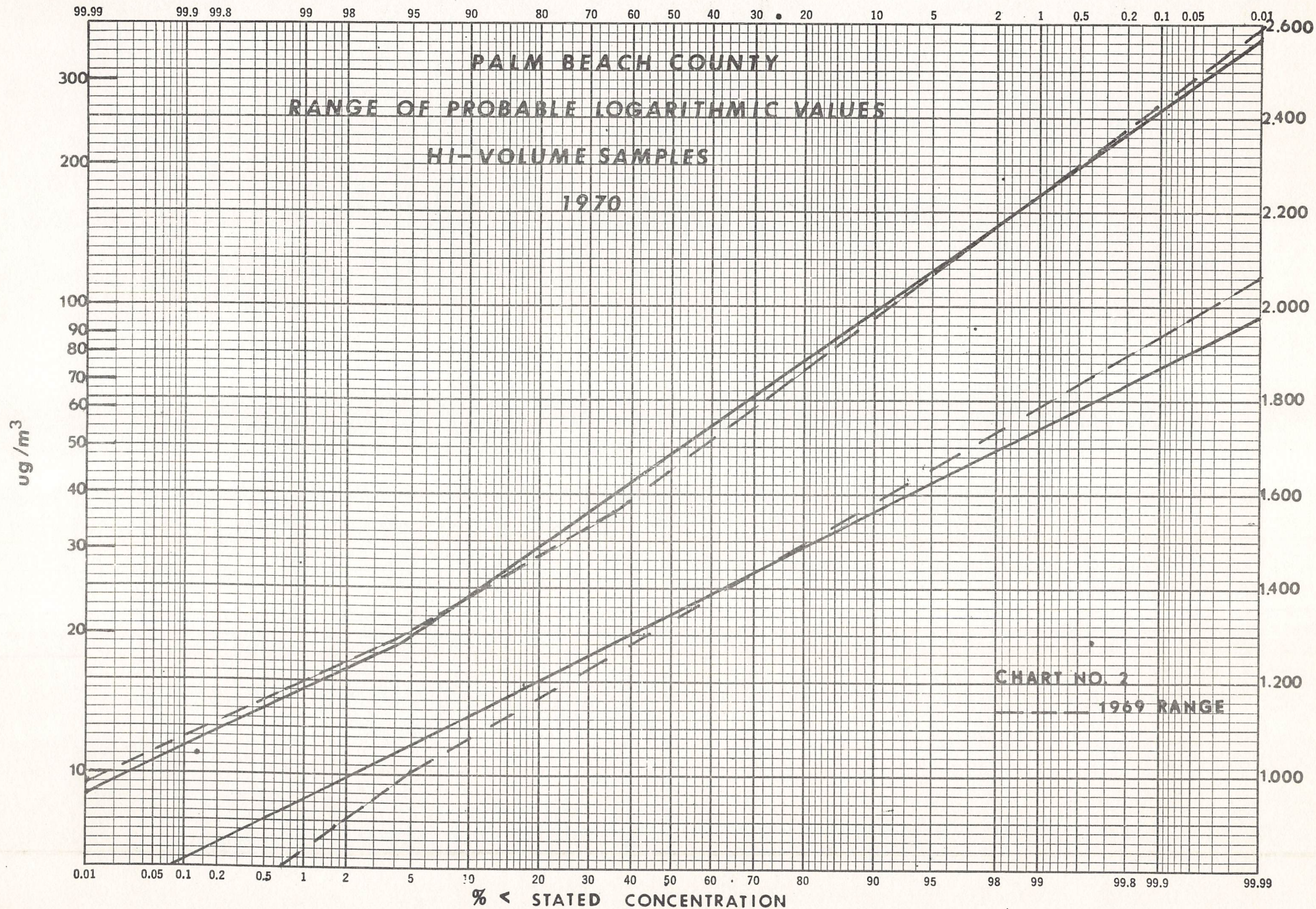
### 9.3 Sugar Industry

The survey of the effects of the sugar industry on Palm Beach County was described in the 1970 Annual Report. The data collected has been subjected to statistical analysis.

A total of three hundred eighty-four (384) microscopic slides were exposed on the north-south intercept line to the west of the cane fields, for periods of two (2) to three (3) days each. Of this total, one hundred and twenty-six (126) contained one or more particles of vegetation ash. Of the total positive samples, one hundred and twenty-three (123) had been exposed to westerly winds for at least three (3) hours of the sampling period. A significant difference in the percentage of positive samples recorded during the cane burning season as opposed to those studied immediately proceeding and following this period. The slide placement and sampling procedure of this study were biased to collect particles coming from the west.

As opposed to the 1967-68 study, the suspended particulate data collected during this period at the Royal Palm Beach permanent monitoring station showed no significant winter season increase in particulate pollution during days with westerly winds. It is felt that this reflects unusual meteorological conditions

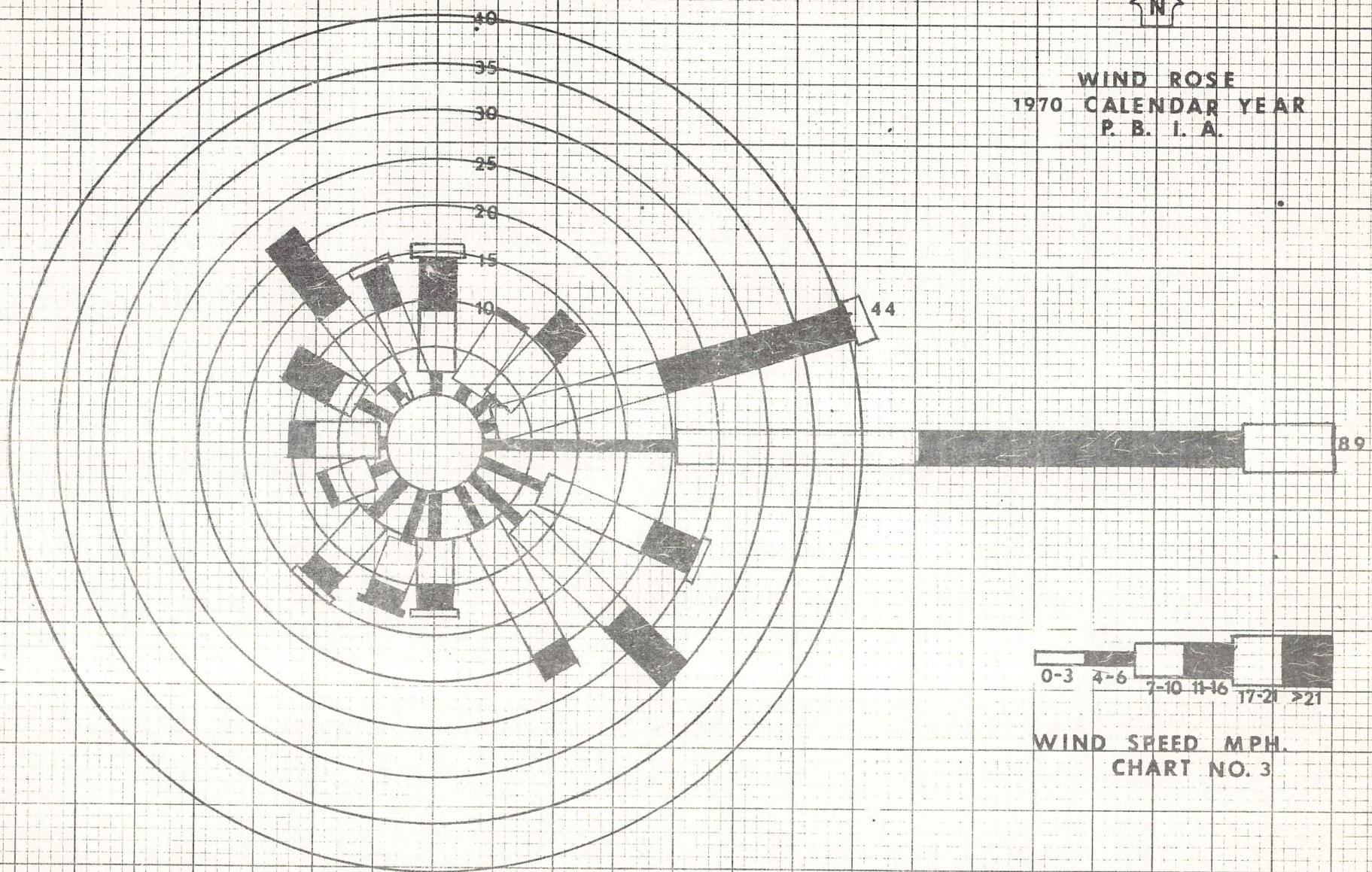








WIND ROSE  
1970 CALENDAR YEAR  
P. B. I. A.



WIND SPEED MPH.  
CHART NO. 3



**Table 3**  
**TOTAL SUSPENDED PARTICULATES**  
**1970**

LOCATION	NUMBER OF SAMPLES													CONCENTRATIONS (ug/m <sup>3</sup> )				
	J	F	M	A	M	J	J	A	S	O	N	D	TOT.	MAX.	MIN	Arith Avg.	Geom Mean	Geom Std. Dev.
Tequesta	10	9	12	10	10	10	11	10	10	10	7	11	120	74.3	13.3	30.4	28.3	1.45
North Palm Beach	11	8	10	9	10	10	11	11	10	10	9	11	120	82.3	1.3	31.7	28.4	1.76
West Palm Beach	9	8	8	9	9	9	7	8	8	10	6	9	100	115.7	13.9	40.9	39.5	1.42
Lake Worth	10	10	10	11	10	7	12	9	8	11	7	11	116	224.8	8.0	30.9	28.2	1.47
Delray Beach	10	10	9	10	10	8	10	11	9	9	10	10	116	76.7	8.3	36.2	33.6	1.49
Boca Raton	11	10	11	11	10	8	11	9	9	11	9	11	121	80.1	9.6	33.5	31.0	1.48
Royal Palm Beach	8	9	12	10	10	4	10	10	10	11	9	9	112	71.7	2.1	25.8	23.3	1.59
Belle Glade	7	9	11	10	10	10	8	11	10	11	9	11	117	273.9	14.5	54.6	47.1	1.70



Table 4 (Con't.)  
MONTHLY AVERAGE CONTENT - SUSPENDED PARTICULATES - 1970

LOCATION	ITEMS MEASURED	ARITHMETIC AVERAGE - $\mu\text{g}/\text{m}^3$												
		J	F	M	A	M	J	J	A	S	O	N	D	TOTAL
ROYAL PALM BEACH	Total	26.6	30.9	25.3	29.4	29.6	26.8	26.4	28.2	15.2	18.8	25.0	29.2	25.8
	Organics	3.6	0.7	1.1	0.6	2.3	0.9	1.1	0.9	0.7	5.6	3.3	7.3	2.3
	Sulfates	4.0	4.7	4.8	3.7	8.0	3.2	1.8	1.4	1.6	2.9	4.9	2.3	3.6
	Nitrates	0.8	0.9	0.6	0.8	1.3	0.6	0.4	0.6	0.5	0.6	1.1	1.0	0.8
BELLE GLADE	Total	55.5	71.8	66.9	56.9	62.5	29.4	30.8	35.3	34.5	40.5	90.0	80.9	54.6
	Organics	3.2	3.5	2.5	2.7	0.9	1.4	1.5	1.4	1.8	7.2	11.1	5.9	3.6
	Sulfates	2.9	5.8	7.1	3.0	5.4	3.5	1.7	2.0	2.5	3.4	6.1	3.4	3.9
	Nitrates	1.3	1.4	1.0	1.0	0.7	0.7	0.6	0.6	0.8	0.8	1.4	1.8	1.0



Table 5

## ANNUAL DUSTFALL - 1970

LOCATION	# SAMPLES	TOTAL CONCENTRATIONS TONS/Mi <sup>2</sup>			ARITH. AVERAGE TONS/Mi <sup>2</sup>		
		MAX.	MIN.	ARITH. AVG.	INSOL.	SOL.	COMP. LOSS.
Tequesta	11	19.24	2.65	8.31	3.95	4.36	0.95
North Palm Beach	12	23.98	2.23	9.29	2.52	6.77	1.38
West Palm Beach	12	20.49	4.32	11.34	5.26	6.08	1.93
Lake Worth	11	19.38	2.79	8.96	3.24	5.71	0.82
Delray Beach	11	18.12	2.93	10.05	3.12	6.62	1.27
Boca Raton	10	17.01	2.37	9.27	3.01	6.26	1.01
Royal Palm Beach	8	56.45	5.44	19.99	7.86	12.13	2.96
Belle Glade	12	24.39	4.74	11.30	5.96	5.34	2.32



favorable for dispersion rather than operational or production changes within the industry. These conditions include persistent high surface winds, strong vertical turbulence, increased rainfall, and reduction in the occurrence of morning stable inversions.

Preliminary sulfur dioxide monitoring of the Belle Glade area begun 1970 has indicated a higher level of this pollutant than measured in other areas of the county and a significant seasonal influence. The twenty-four hour maximum, 0.052 ppm, eight hour maximum, 0.123 ppm, and one hour maximum, 0.318 ppm, are all higher than those levels recorded elsewhere.

#### 9.3) Gaseous Monitoring

On June 16, 1970, the mobile air monitoring laboratory became operational and the initial survey of gaseous pollutants began in Palm Beach County.

At that time the sampling equipment in the mobile laboratory consisted of



three (3) channel Technicon Auto-analyzer system monitoring  $\text{SO}_2$  by a modified West-Gaeke method,  $\text{NO}_2$  by the Lyshkow modification of the Saltzman method and total oxidants by the neutral-buffered potassium iodide method.

In this initial survey the ambient air was monitored at eight (8) sites for measuring suspended particulate in our permanent air monitoring network. The air was sampled at each location for approximately two (2) weeks, thus this initial survey involved approximately sixteen (16) weeks of sampling ending October 26, 1970. The data from this survey follows.

In January, 1971, after a six (6) month delay in delivery, a total hydrocarbon analyzer and a CO analyzer were received from Mine Safety Appliances Company. These instruments were installed in the Van at this time. The CO analyzer worked satisfactorily and was put into operation; however, the hydrocarbon analyzer did not work and was exchanged by the factory for



another unit which did not work. The second hydrocarbon analyzer was returned to the factory and exchanged for the original unit which is presently in the mobile laboratory and does not function properly. Presently we are waiting for Mine Safety Appliance Company to either repair the unit that we have or send us another one which operates satisfactorily.

The carbon monoxide analyzer was operated for about ten (10) weeks, and data were accumulated. After this time the system's recorder failed and to date we have been unable to get it repaired.

As soon as these two (2) instruments are operational, we will be monitoring total hydrocarbons and CO as well as NO<sub>2</sub>, SO<sub>2</sub> and total oxidants but presently we are only able to monitor the last three (3) parameters.

Data recorded during the sixteen (16) week sampling period is presented in Tables 6 (Total Oxidants), 7 (Nitrogen Dioxide) and 8 (Sulfur Dioxide). Concentration vs.



time for the above gaseous pollutants is presented in charts 4 through 6.

9.4) Comparison of Measured Levels to Proposed Standards

Table Number 8 compares the proposed national standards for those pollutants measured to the values recorded during this sampling period. It will be noted that oxidant levels exceed the standard at all but one (1) station. The area exceeds this proposed standard 3% of the time. Levels of other gaseous pollutants are considerably below the levels proposed. However, this sampling period was during those months when levels would be expected to be below the annual mean. Measurements being made currently will reflect increased population, vehicular travel, and power demands; commercial and residential heating, and the contribution of the sugar industry.

The State has established a regional classification of air quality standards. Priority III which has the most stringent standards adopts the federal secondary



Table 6  
TOTAL OXIDANTS  
June 16, 1970 - October 26, 1970

STATION	TEQUESTA	NORTH PALM BEACH	WEST PALM BEACH	LAKE WORTH	BOCA RATON
1 Hr. Max.	.104 ppm	.176 ppm	.114 ppm	.129 ppm	.048 ppm
8 Hr. Max.	.093 ppm	.086 ppm	.073 ppm	.089 ppm	.037 ppm
CONC. RANGE < 0.010	345 Min.	660 Min.	0 Min.	15 Min.	0 Min
0.010-0.019	2190 "	3585 "	1470 "	6675 "	1350 "
0.020-0.029	2520 "	2685 "	4215 "	3735 "	11,535 "
0.030-0.039	3915 "	3105 "	6420 "	2460 "	2775 "
0.040-0.049	2415 "	2265 "	3105 "	1155 "	330 "
0.050-0.059	1245 "	900 "	975 "	1035 "	0 "
0.060-0.069	1080 "	1005 "	240 "	465 "	0 "
0.070-0.079	750 "	915 "	165 "	570 "	0 "
0.080 - 0.089	615 "	360 "	60 "	435 "	0 "
0.090-0.099	480 "	15 "	15 "	315 "	0 "
> 0.100	150 "	210 "	195 "	135 "	0 "
Total # Min.	15,705	15,705	16,860	16,995	15,990
Downtime Auto. Baseline	1605	1605	2385	2390	2220
Routine Maintenance	365	365	240	210	240
Mechanical Breakdown	1980	3610	450	15	1575
Oper. Error	1630	----	----	175	----
Total Downtown	5580	5580	3075	2790	4035
Time At Site	21,285	21,285	19,935	19,785	20,025



DELRAY BEACH	ROYAL PALM BEACH	BELLE GLADE	COMPOSITE		
.092 ppm .066 ppm	.076 ppm .068 ppm	.078 ppm .061 ppm	.176 ppm .093 ppm	%	CUM. %
0 Min.	615 Min.	1710 Min.	Total 3345 Min.	2.68	2.68
1275 "	2010 "	2610 "	21,165 Min.	16.98	19.67
1305 "	2115 "	2265 "	30,375 Min.	24.37	44.04
2430 "	2145 "	2625 "	25,875 Min.	20.76	64.80
4695 "	4125 "	2310 "	20,400 Min.	16.37	81.17
3375 "	2790 "	2265 "	12,585 Min.	10.10	91.27
585 "	795 "	810 "	4980 Min.	4.00	95.27
60 "	225 "	120 "	2805 Min.	2.25	97.52
30 "	15 "	15 "	1530 Min.	1.23	98.75
45 "	0 "	0 "	870 Min.	0.70	99.45
0 "	0 "	0 "	690 Min.	0.55	100.00
13,800	14,835	14,730	124,620		
1950	2130	2100	16,385		
285	330	375	2,410		
4185	2550	2820	17,185		
----	----	----	1,805		
6420	5010	5295	37,785		
20,220	19,845	20,025	162,405		



# TOTAL OXIDANTS

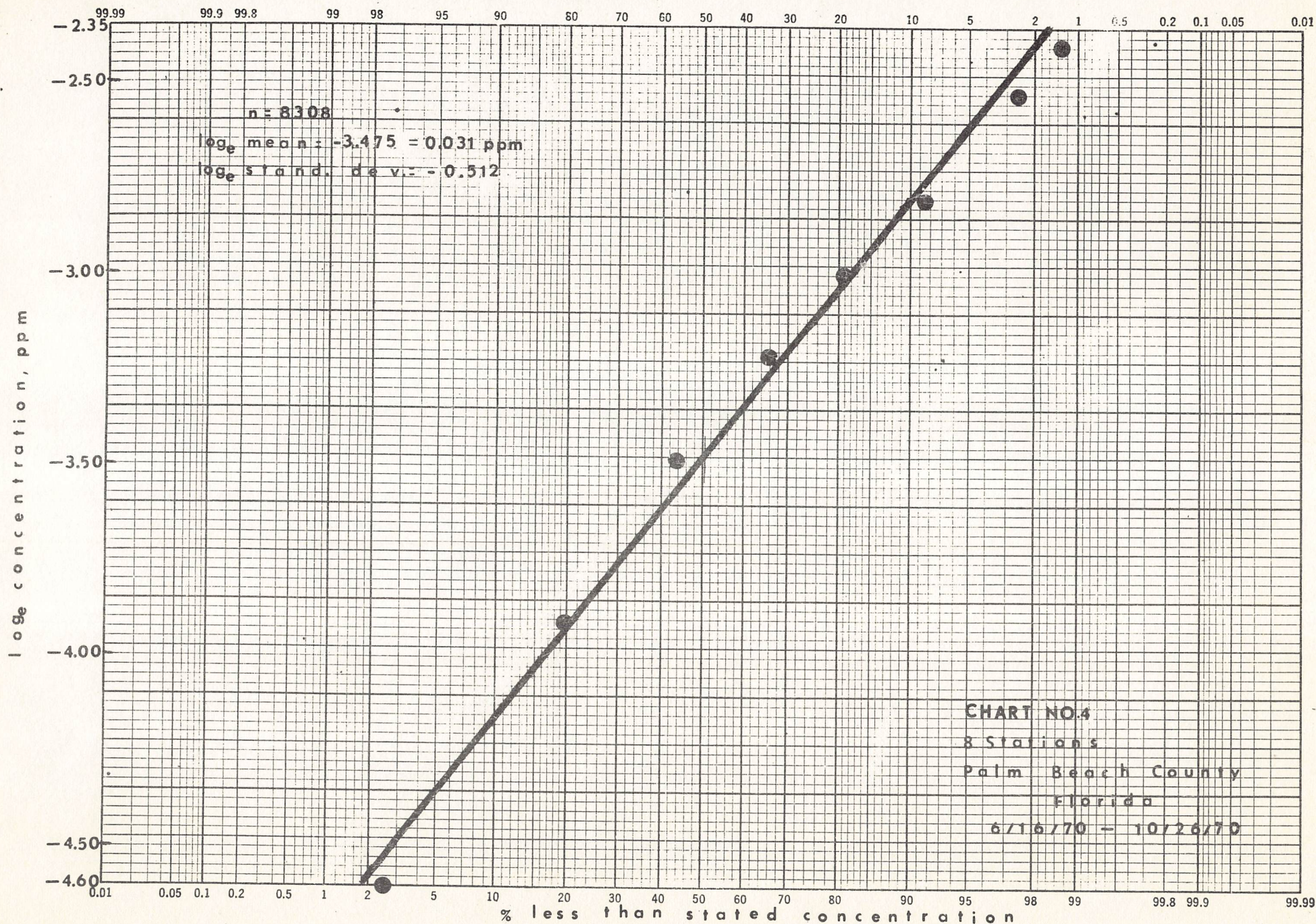




TABLE 7  
 AMBIENT AIR - NO<sub>2</sub>  
 6/16/70 - 10/26/70

STATION	TEQ.	N. P. B.	W. P. B.	L. W.	B. R.
Max. - 1 Hr.	.044 ppm	.084 ppm	.097 ppm	.098 ppm	.064 ppm
Max. - 8 Hr.	.032 ppm	.060 ppm	.068 ppm	.060 ppm	.048 ppm
CONCENTRATION < 0.002	225 min.	300 min.	315 min.	660 min.	75 min.
0.002-0.005	2115 "	3210 "	2415 "	2070 "	3045 "
0.006-0.010	9690 "	4410 "	5880 "	3855 "	4590 "
0.011-0.015	3000 "	1650 "	2700 "	1365 "	4830 "
0.016-0.020	1215 "	1365 "	1905 "	1140 "	1350 "
0.021-0.025	735 "	960 "	735 "	1050 "	585 "
0.026-0.030	465 "	1500 "	870 "	1065 "	675 "
0.031-0.035	315 "	1530 "	720 "	585 "	615 "
0.036-0.040	135 "	855 "	210 "	645 "	360 "
0.041-0.045	135 "	405 "	315 "	600 "	465 "
0.045	30 "	1290 "	1200 "	1785 "	675 "
Total # Min. Downtime	18060 "	17475 "	17280 "	14820 "	17265 "
Auto Baseline	2220 "	1830 "	2460 "	2085 "	2415 "
Routine Maintenance	675 "	240 "	195 "	270 "	210 "
Mechanical Breakdown	420 "	0 "	0 "	2460 "	15 "
Oper. Error	1395 "	1740 "	0 "	150 "	120 "
Total	4710 "	3810 "	2655 "	1965 "	2760 "
Total Time at Site	22770 "	21285 "	19935 "	19785 "	20025 "



D. B.	R. P. B.	B. G.	COMPOSITE		
.055 ppm .051 ppm	.031 ppm .018 ppm	.118 ppm .067 ppm	TOTAL	%	CUM %
270 min	2805 min.	795 min.	5445 min.	4.13	4.13
3060 "	4485 "	2295 "	22695 "	17.20	21.33
7875 "	4275 "	4470 "	45045 "	34.15	55.48
1875 "	1530 "	1875 "	18825 "	14.27	69.75
885 "	750 "	1275 "	9885 "	7.49	77.24
510 "	525 "	825 "	5925 "	4.49	81.73
585 "	165 "	810 "	6135 "	4.65	86.38
1065 "	105 "	945 "	5880 "	4.46	90.84
570 "	15 "	495 "	3285 "	2.49	93.33
330 "	0 "	210 "	2460 "	1.86	95.19
435 "	0 "	900 "	6330 "	4.80	100.00
17460 "	14655 "	14895 "	131910 "		
2490 "	2100 "	2100 "	17700 "		
270 "	405 "	390 "	2655 "		
0 "	2550 "	2625 "	8070 "		
0 "	135 "	15 "	3555 "		
2760 "	5190 "	5130 "	31980 "		
20220 "	19845 "	20025 "	163890 "		



# NITROGEN DIOXIDE

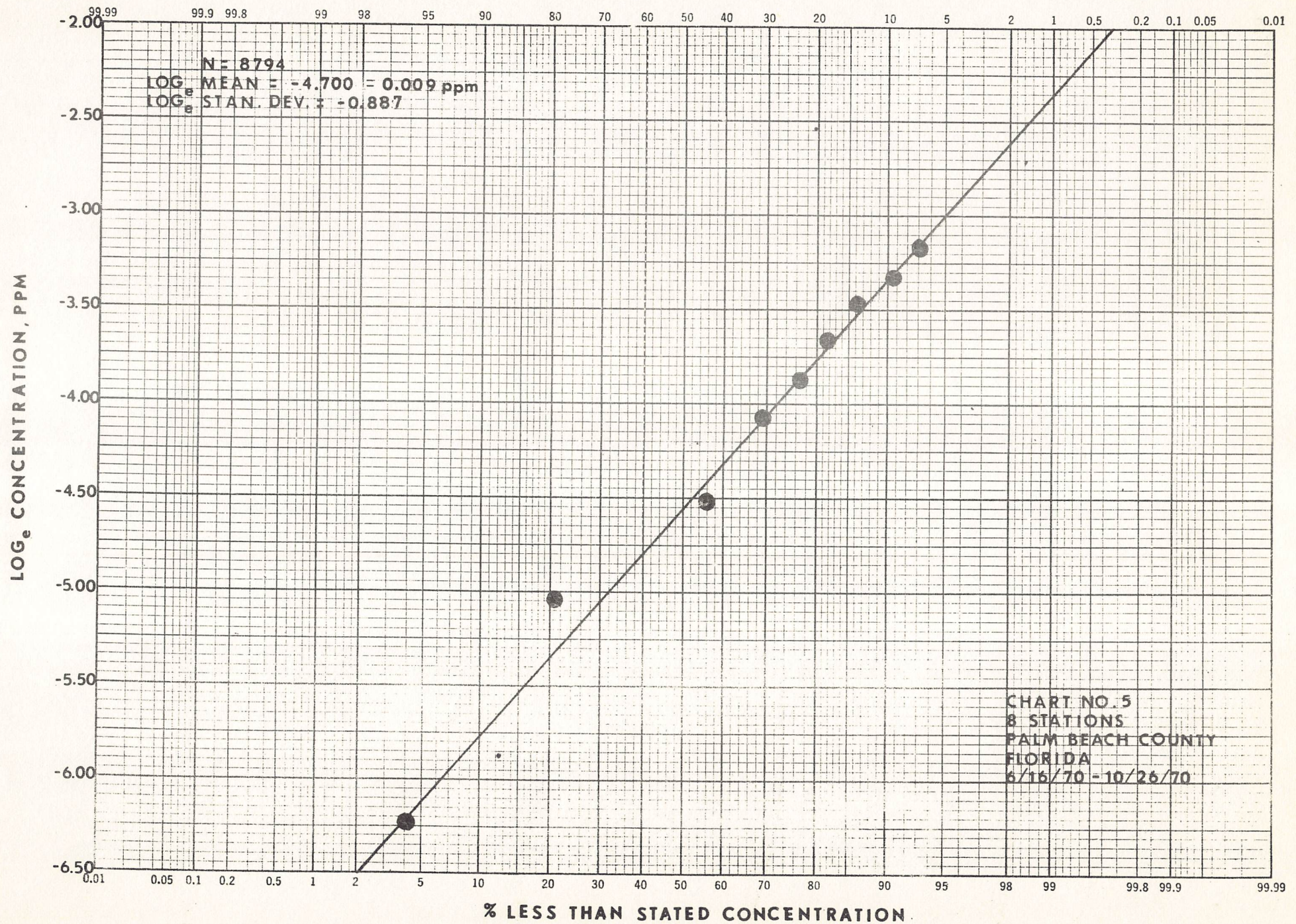




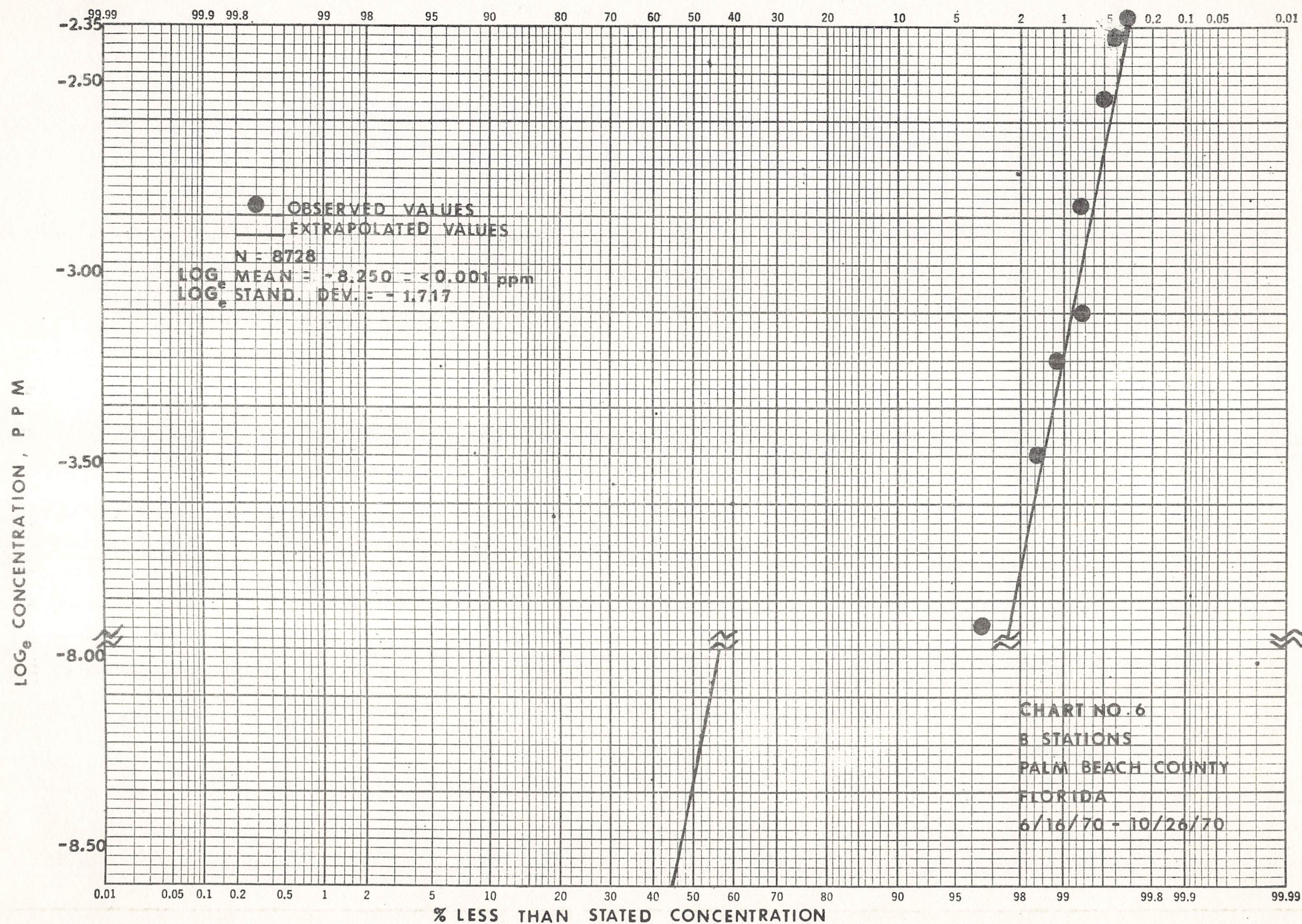
Table 8  
 AMBIENT AIR - SO<sub>2</sub> (6/16/70 - 10/26/70)

STATION	TEQ.	N. P. B.	W. P. B.	L. W.	B. R.
Max. 1 Hr.	.035 ppm	.196 ppm	.094 ppm	.031 ppm	.076 ppm
Max. 4 Hr.	.025 ppm	.097 ppm	.032 ppm	.024 ppm	.044 ppm
Concentration < 0.010	minutes 17010	minutes 15510	minutes 16230	minutes 15120	minutes 16830
0.010-0.019	90 Min.	255 min.	60 min.	360 min.	180 min.
0.020-0.029	360 "	720 "	375 "	735 "	45 "
0.030-0.039	45 "	255 "	165 "	120 "	90 "
0.040-0.049	30 "	65 "	60 "	0 "	60 "
0.050-0.059	0 "	5 "	60 "	0 "	75 "
0.060-0.069	0 "	60 "	30 "	0 "	30 "
0.070-0.079	0 "	30 "	0 "	0 "	15 "
0.080-0.089	0 "	30 "	15 "	0 "	30 "
0.090-0.099	0 "	30 "	0 "	0 "	0 "
> 0.100	0 "	285 "	15 "	0 "	0 "
Total # Min.	17535 min.	17355 min.	17010 min.	16335 min.	17335 min.
Downtime Auto Baseline	2160	1830	2430	2250	2445
Mech. Breakdown	420	0	0	0	0
Oper. Error	1695	1720	315	1080	0
Routine Maintenance	975	380	180	120	225
Time At Site	22785	21285	19935	19785	20025



D. B.	R. P. B.	B. G.	COMPO SITE		
.069 ppm .021 ppm	.106 ppm .036 ppm	.000 ppm .000 ppm	.196 ppm .097 ppm	%	CUM. %
minutes 16155	minutes 13995	minutes 14430	Total 125280	95.69	96.61
30 min.	225 min.	0 min.	1200 min.	.92	
0 "	135 "	0 "	2370"	1.81	98.42
15 "	30 "	0 "	720 "	.55	98.97
0 "	75 "	0 "	390 "	.30	99.27
0 "	15 "	0 "	165 "	.13	99.39
0 "	45 "	0 "	165 "	.13	99.52
0 "	30 "	0 "	75 "	.06	99.58
0 "	45 "	0 "	120 "	.09	99.68
0 "	45 "	0 "	75 "	.06	99.72
30 "	30 "	0 "	360 "	.27	100.00
16230 min	14670 min	14430 min	130920 min.		
2280	2310	2010	17715		
1485	2550	2625	7080		
0	0	585	5395		
225	315	375	2795		
20220	19845	20025	163905		







standards for sulfur dioxide, nitrogen dioxide, and particulates. The maximum allowable concentration of total oxidants would be less than  $170 \text{ ug/m}^3$  one hour maximum.

On September 3, 1970, the Department of Air and Water Pollution Control issued proposed standards for the Southeast Air Quality Control Region. This proposal stated that the following concentrations should not be exceeded at any single point location within the region. See Table No. 10.

It will be noted that all measured stations meet particulate standards for the annual geometric mean but that two (2) stations exceed the twenty-four (24) hour maximum.

One station exceeds the allowable limits for sulfur dioxide on the basis of annual mean calculations. Only three (3) stations meet the standards for twenty-four (24) hour maximums, and only one (1) station meets the standards for one (1) or four (4) hour maximums.



Proposed standards for carbon monoxide levels were  $9.2 \text{ ug/m}^3$ , eight hour average; and  $13.8 \text{ ug/m}^3$ , one hour average. No measurements for this pollutant in this county are available at this time.

Suspended particulate calculations are on the basis of a yearly sampling period. Gaseous calculations are based on the sixteen (16) week period previously described. Seasonal variations are anticipated for all future gaseous samplings.

10.0) EMISSION INVENTORY

10.1) Introduction

The emission inventory presented in this report represents the calculated emissions within the County for the 1970 calendar year. Although there has been no change in the major categories considered, industrial emissions has been expanded to include major flood control pump stations, a food processing plant, and the fuel consumption of additional boiler facilities used for purposes other than space heating or cooling.



Table 9  
PROPOSED NATIONAL AMBIENT AIR QUALITY STANDARDS AND  
MEASURING POLLUTANT LEVELS

PROPOSED NATIONAL AIR QUALITY STANDARDS	NO <sub>2</sub>		SO <sub>2</sub>	
	Annual Arith Mean ug/m <sup>3</sup>	24 Hr. <sub>3</sub> Max. ug /m <sup>3</sup>	Annual Arith Mean ug /m <sup>3</sup>	24 Hr. <sub>3</sub> Max. ug /m <sup>3</sup>
Primary	100	250	80	365
Secondary	100	250	60	260
Measured Levels	*		*	
Tequesta	20	34	2	29
N. P. B.	35	64	15	92
W. P. B.	31	85	6	20
L. W.	38	63	6	29
D. B.	25	54	1	9
B. R.	28	57	3	37
R. P. B.	14	25	6	17
B. G.	32	78	0	0

\*On basis 2 week sampling period, each station 6/16/70-10/26/70.



TOTAL OXIDANTS		PARTICULATE MATTER	
1 Hr. Concentrate Maximum ug/m <sup>3</sup>		Annual Geom. Mean ug/m <sup>3</sup>	24 Hr. Concentration ug/m <sup>3</sup>
125		75	260
125		60	150
*			
204		28	74
345		28	82
223		40	116
253		28	225
180		34	77
94		31	80
149		23	72
153		47	274



Table 10  
PROPOSED SOUTHEAST FLORIDA AIR QUALITY CONTROL  
REGION AMBIENT AIR STANDARDS & MEASURED LEVELS

SUSPENDED PARTICULATES		
	Annual Geometric Mean $\mu\text{g}/\text{m}^3$	Twenty-Four Hour Average $\mu\text{g}/\text{m}^3$
Proposed Standards	50	180
Measured Levels		
Tequesta	28	74
North Palm Beach	28	80
West Palm Beach	40	116
Lake Worth	28	225
Delray	34	77
Boca Raton	31	80
Royal Palm	23	72
Belle Glade	47	274



SULFUR DIOXIDE

Annual Arith. Mean ug/m <sup>3</sup>	Twenty-Four Hour Average ug/m <sup>3</sup>	Four Hour Average ug/m <sup>3</sup>	One Hour Average ug/m <sup>3</sup>
8.6	28.6	57.2	286.0
2	29	72	100
15	92	277	561
6	20	92	269
6	29	69	89
1	9	60	197
3	37	126	217
6	17	103	303
0	0	0	0



As previously discussed, implementation of a state permit system for the operation, construction, or expansion of any installation that may be a source of air or water pollution has provided additional information concerning industrial processes and fuel consumption within the County. This information augmented that gathered by standard survey procedures.

A point source inventory and a tons contribution per day of operation inventory have been included to identify area problems and shock pollutant loads in various areas of the County

The individual pollutants reported remain aldehydes, carbon monoxide, hydrocarbons, nitrogen oxides (calculated as nitrogen dioxide), sulfur oxides (calculated as sulfur dioxide and sulfur trioxide), organic acids and particulates. Fluoride emissions within the County during this report period dropped below the level of significance. There has been no change in the emission factors applied for these pollutants.



While it is felt that the contributions of natural methane generation, open burning of land clearing debris and wild fires are significant, lack of emission factors or reliable records of materials involved have prevented their inclusion in this report.

#### 10.2) Methodology

The survey of major fuel users, suppliers and industries in the area was employed for the 1970 calendar year. The 1970 Census figures were substituted for population estimates used for the previous inventories. Climatological data was supplied by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration.

Emission factors applied were those given in "Compilation of Air Pollution Emission Factors" by R. L. Duprey, U. S. Department of Health, Education, and Welfare Publication 1968 with the following exceptions.

- (1) Particulate emissions from asphalt batching plants were based on stack tests of these plants and yearly production figures.



Table II  
SUMMARY OF AIR POLLUTION EMISSIONS  
IN PALM BEACH COUNTY  
1970 (T/Yr)

SOURCE	ALDE- HYDES	CARBON MONOXIDE	HYDRO CARBONS	OXIDES OF NITROGEN	SULFUR DIOXIDE
TRANSPORTATION	380	137,451	23,136	9791	827
Motor Vehicles	335	135,770	22,941	9209	827
Aircraft	45	1681	195	582	
INDUSTRIAL EMISSIONS	213	41891	8656	12844	24862
Steam Elect.	47	18	203	10388	20455
Other Industrial	166	41873	8453	2456	4407
Aircraft	26	218	69	428	798
Concrete Batch					
Asphalt Batch	1	1	1	46	246
Sugar	132	41,624	7723	1807	3265
Processing	7	30	64	175	98
Other Solvent			596		
REFUSE DISPOSAL	2	1095	328	140	4
Incineration	1	38	2	8	4
Open Burning	1	966	304	126	
Auto Salvage	<1	91	22	6	
RESIDENTIAL & COMMERCIAL HEATING & COOLING	21	21	22	863	819
TOTALS	616	180458	32142	23638	26512



SULFUR TRIOXIDE	ORGANIC ACIDS	PARTICULATE	TOTAL	CONTRIBUTION
	423	1640	173648	59.85
	423	1341	170846	59.88
		299	2802	0.97
384	6826	16809	112485	38.77
312		740	32171	11.09
72	6818	16069	80314	27.68
12		236	1787	0.62
		66	66	0.02
3.		207	505	0.17
42	6818	15550	76961	26.52
15		66	455	0.16
			596	0.21
	194	266	2029	0.70
	11	11	75	0.03
	171	182	1750	0.60
	12	73	204	0.07
10		180	1936	0.67
394	7443	18951	290154	100.00



Table 12  
SUMMARY OF AIR POLLUTION  
EMISSIONS IN PALM BEACH COUNTY  
1970 (TONS/DAY)

SOURCE CATEGORY	DAYS/YR.	ALDEHYDES	CARBON MONOXIDE	HYDRO-CARBONS	NITROGEN OXIDES	SULFUR DIOXIDE
TRANSPORTATION						
Motor Vehicles	365	0.9	372.0	62.9	25.2	2.3
Aircraft	365	0.1	4.6	0.5	1.4	
INDUSTRIAL EMISSIONS						
Steam - Elect. Util	365	0.1	< 0.1	0.6	28.5	56.0
Other						
Aircraft	365	0.1	0.6	0.2	1.2	2.2
Concrete Batching	312					
Asphalt Batching	104	< 0.1	< 0.1	< 0.1	0.4	2.4
Sugar	120	1.1	346.9	64.4	15.1	27.2
Processing	312	< 0.1	0.1	0.2	0.6	0.3
Other Solvent Emissions	312			1.9		
REFUSE DISPOSAL						
Incinerator	365	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Open Burning	148	< 0.1	6.5	2.1	0.8	
Auto Salvage	183	< 0.1	0.5	0.1	< 0.1	
RESIDENTIAL & COMMERCIAL HEATING & COOLING	256	0.1	0.1	0.1	3.4	3.2



SULFUR TRIOXIDE	ORGANIC ACIDS	OTHER ORGANIC	FLUORIDE	PARTICU- LATE	TOTAL
	1.2			3.7	468.2
				0.8	7.4
0.9	<0.1	0.1		2.0	88.2
<0.1		<0.1	<0.1	0.6	5.2
				0.2	0.2
<0.1				4.8	7.6
0.3	56.8			129.6	641.4
<0.1				0.2	1.4
					1.9
	<0.1			<0.1	0.1
	1.2			1.2	11.8
	0.1			0.4	1.1
<0.1				0.7	7.6



TABLE 13  
SUMMARY OF POINT SOURCES  
OF AIR POLLUTION EMISSIONS IN  
PALM BEACH COUNTY  
1970 (Tons/Day)

POINT SOURCE	ID #	DAYS/YR.	ALDE-HYDES	CARBON MONOXIDE	HYDRO-CARBON	OXIDES OF NITROGEN
Power Generating Plant Riviera Beach	1	365	0.1	< 0.1	0.5	27.1
Power Generating Plant Lake Worth	2	365	< 0.1	< 0.1	0.1	1.4
Industrial Complex	3, 4 5	365	0.1	0.1	0.2	1.2
Asphalt Batch Plant	6	195	< 0.1	< 0.1	< 0.1	0.1
Asphalt Batch Plant	7	82	< 0.1	< 0.1	< 0.1	0.3
Asphalt Batch Plant	8	35	< 0.1	< 0.1	< 0.1	< 0.1
Auto Salvage Yard	9	183	< 0.1	0.5	0.1	< 0.1
Pahokee North Dump	10	365	< 0.1	0.2	0.1	< 0.1
Boca Raton Trash Dump	11	365	< 0.1	0.4	0.2	0.1
Delray Bch. Dump	12	12	< 0.1	5.9	2.1	0.8
Pahokee So. Dump	13	365	< 0.1	0.1	0.1	< 0.1
W. P. B. Trash Dump	14	12	< 0.1	26.6	9.4	3.4
Belle Glade Dump	15	30	< 0.1	2.5	0.9	0.3
Jupiter Dump	16	15	< 0.1	4.1	1.5	0.5
Boynton Bch. Dump	17	22	< 0.1	4.3	1.5	0.6
Atlantic Sugar Mill	18	75	0.1	0.2	< 0.1	0.3



SULFUR DIOXIDE	SULFUR TRIOXIDE	ORGANIC ACIDS	OTHER ORGANICS	FLUORIDES	PARTI- CULATE	TOTAL
55.7	0.9		0.1		1.9	86.3
0.4	< 0.1	< 0.1	< 0.1		0.1	2.0
2.2	< 0.1	< 0.1		< 0.1	0.7	4.5
0.6	< 0.1				0.7	1.4
1.5	< 0.1				0.1	1.9
< 0.1	< 0.1				< 0.1	0.1
0.1					0.4	1.1
		< 0.1			< 0.1	0.3
		0.1			0.1	0.9
		< 1.0			1.1	10.9
		< 0.1			< 0.1	0.2
		4.7			5.0	49.1
		0.4			0.5	4.6
		0.7			0.8	7.6
		0.8			0.8	8.0
1.0	< 0.1	0.1			4.0	5.7



Table 13  
SUMMARY OF POINT SOURCES  
OF AIR POLLUTION EMISSIONS IN  
PALM BEACH COUNTY  
1970 (Tons/Day)

POINT SOURCE	ID #	DAYS/YR.	ALDEHYDES	CARBON MONOXIDE	HYDRO CARBON	OXIDES OF NITROGEN
Talisman Sugar Mill	19	80	0.1	0.3	0.1	0.5
Osceola Mill	20	137	0.1	0.3	0.1	0.5
Sugar Cane Grower Coop.	21	130	0.2	0.5	0.1	2.0
Florida Sugar Corp. Mill	22	90	0.1	0.2	≤ 0.1	0.5
U. S. Sugar Corp.	23	121	0.2	0.4	0.1	0.5
Okeelanta Sugar Mill	24	150	0.3	0.7	0.2	1.9
Sugar Cane Field Burns	25	120	< 0.1	344.3	63.8	8.5



SULFUR DIOXIDE	SULFUR TRIOXIDE	ORGANIC ACIDS	OTHE R ORGANICS	FLUORIDES	PARTI- CULATE	TOTAL
1.5	< 0.1	0.2			13.6	16.3
1.7	< 0.1	0.2			10.6	13.6
7.9	0.1	0.3			5.5	16.6
2.4	< 0.1	0.1			.3.3	6.6
2.3	< 0.1	0.3			10.7	14.5
8.8	< 0.1	0.4			11.5	23.9
		55.3			72.3	544.2



- (2) Carbon monoxide and hydrocarbon emissions for cane field burning were based on a study by E. F. Darley reported in an article "The Contribution of Agricultural Wastes to Photochemical Air Pollution", Journal of Air Pollution Control, January, 1966.
- (3) Particulate emissions from the sugar mills were based on stack tests of each mill and actual days of production reported by each mill.
- (4) Gaseous emissions from sugar mills using bagasse as fuel were calculated on the basis of municipal incineration of landscape refuse.

The primary point emission sources are located on an attached emission source map. Table number 13 keys certain emission data for these point sources.

### 10.3 Discussion of Results

This report will present changes in the source involved and information available at the time of the report and relate these changes to calculated emissions. The second part of this section will deal with individual pollutants.



## 10.31 Sources

### MOTOR VEHICLES

Increases in the pollutant contribution from this source are a reflection of increased motor vehicle population and fuel sales. Relative changes of the pollutants reflect the increasing proportion of vehicles equipped with pollution control devices.

### AIRCRAFT

Operational records for the Pahokee and Boca Raton airports are available for this report for the first time. These airports are used primarily by piston driven aircraft which emit relatively high levels of carbon monoxide.

### STEAM ELECTRIC UTILITIES

Significant reductions in the oxides of sulfur and particulates emitted by this industry are a reflection of the higher ratio of natural gas to residual oil used as fuel and lower sulfur content of oil used. Although electrical production has increased by 14% since 1968, sulfur dioxide emissions from this source have been reduced by 25% and particulate emissions by 11%.

### AIRCRAFT INDUSTRY

Reduction in pollution contributions in this industry are a result of less fuel usage at the test facilities. In addition, total fluoride emissions were only 0.08 tons during this report period.



#### CONCRETE BATCHING

The increase in calculated emission for this industry reflect increased production within the county.

#### ASPHALT BATCHING

This industry has reported a significant increase in production since 1968. However, decreased mass emission rates based on stack sampling and changes in the proportions of Type I to Type II mix production has prevented a corresponding increase in particulate emissions for the industry. Actual fuel consumption figures were available for the first time for this report period.

#### SUGAR INDUSTRY

Information furnished by the industry in complying with the State permit system has been utilized for mill emissions. The significant increase in calculated emissions of oxides of sulfur is related to higher consumption of residual fuel oil than had been assumed for previous reports.

#### SOLVENT EMISSIONS

Increases in these calculated emissions is related to increased population and increases in the number of automobiles registered in the county.

#### PROCESSING

This category, as previously stated, includes emissions from food and chemical processing plants.



major pumping stations and boilers used for processes other than space heating and cooling such as dry cleaning, carpet cleaning, etc.

#### INCINERATION

At the time of the 1968 inventory, there were one-hundred and thirty-one (131) incinerators operating in Palm Beach County. This number has been reduced to sixty-four (64), including crematorium retorts.

#### OPEN-BURNING

Examination of the point source inventory will indicate the degree to which open-burning of refuse has been reduced since 1968. Open-burning to reduce volume is no longer practiced at county operated dumps in the eastern section of the county. Two (2) municipally operated dumps were closed during the inventory year. One municipal dump incurred two (2) massive burns which produced heavy pollution loads in the area adjacent to the dump. Improved operation is reducing the frequency of accidental fires in those dumps which do not practice intentional open-burning.

#### AUTO SALVAGE

The practice of burning automobile components had been discontinued by one (1) salvage company by the 1970 inventory period.



Table 14  
INDIVIDUAL POLLUTANTS SOURCE  
PERCENT CONTRIBUTIONS  
1968

	ALD.	CO	HC	NOX	SO <sub>2</sub>	SO <sub>3</sub>	HAC	Part
TRANSPORTATION	68.00	76.02	70.55	34.76	1.80		3.57	4.76
Motor Vehicle	61.25	75.75	69.89	34.07	1.80		3.57	4.03
Aircraft	6.75	0.27	0.66	0.69				0.76
INDUSTRIAL	26.50	23.25	27.96	58.53	95.37	97.46	93.47	92.62
Steam Electric	13.25	0.01	1.03	49.94	87.39	88.58		4.21
Other	13.25	23.24	26.94	8.60	7.98	8.88	93.47	88.41
Aircraft	10.00	0.20	0.24	2.56	3.31	3.38		1.78
Conc. Batch								0.24
Asph. Batch	0.25	<0.01	<0.01	0.09	0.31	0.42		0.77
Sugar	3.00	23.04	24.73	5.95	4.36	5.07	93.47	85.62
Processing								
Other Solvent			1.85					
REFUSE DISPOSAL	0.75	0.71	1.42	0.74	0.02		2.97	1.42
Incinerator	0.50	0.03	0.07	0.04	0.02			0.05
Open Burning	0.25	0.62	1.27	0.67			2.79	1.00
Auto Salvage	--	0.06	0.08	0.03			0.18	0.38
Heating & Cooling (Commercial & Residential)	4.75	0.01	0.07	5.97	2.81	2.54		1.20
T O T A L	100.00	99.99	100.00	100.00	100.00	100.00	100.01	100.00



Table 15  
INDIVIDUAL POLLUTANTS SOURCE  
PERCENT CONTRIBUTION  
1970

[illegible]



## RESIDENTIAL AND COMMERCIAL HEATING AND COOLING

Increased population and an increase in the number of degree-heating and cooling days has been offset by the conversion from oil to natural gas fuel by a number of hotels and institutions, and the increasing use of natural gas or electrical units for commercial and residential heating and cooling.

### 10.32 Specific Pollutants

Tables number 14 and 15 represent percent contribution of the sources considered to the total of the specific pollutant for 1968 and 1970 respectively. A brief discussion of relative contribution and significant changes follows.

#### ALDEHYDES

Transportation remains the principal source for this pollutant accounting for 61.69% of the total. The sugar industry contributes another 21.43%, a marked increase over the contribution assigned in the 1968 calculations. This increase results from more accurate fuel usage figures rather than a change in the process.

#### CARBON MONOXIDE

Transportation is again the principal contributor to this pollutant load with 76.17% of the total. The sugar industry's contribution of 23.07% is primarily due to the practice of burning cane fields during the harvesting process.



## HYDROCARBONS

Transportation remains the principal contributor of this pollutant accounting for 71.98% of the total. The sugar industry is the other major contributor accounting for 24.03%, primarily from the field burns.

## OXIDES OF NITROGEN

The principal sources of this pollutant are the steam-electric generating plants (43.95%) and transportation (41.42%). The aircraft industry contributes another 10.39%.

## SULFUR OXIDES

Both the percent contributions and actual contributions for this pollutant has changed since the 1968 inventory. The contribution of the steam-electric generating plants has been reduced by 25%, as previously stated. This resulted primarily from increased use of natural gas and a reduction in the use of low grade residual oil. While this industry remains the principal contributor, its percent contribution has been reduced from 87.39% to 77.15%. The sugar industry now accounts for 12.32% of this total. As stated, the reduction in the production of oxides of sulfur by the steam-electric industry represents a real reduction where as the increase in the calculated contribution of the sugar industry reflects more accurate fuel consumption figures rather than an actual increase.



#### ORGANIC ACIDS

The open-burning of cane fields remains the principal source of this pollutant with a minor contribution by the open-burning of refuse. The increase in calculated totals reflects an increase in the acreage of cane harvested.

#### PARTICULATE

The sugar industry accounts for 86% of the calculated particulate load for the county. Of this total, mills produce 44.2%; the open-burning of the fields contributes the remaining 55.8%. Transportation contributes 4.7% and the generation of electricity adds 4.2%.



PALM BEACH COUNTY ENVIRONMENTAL  
CONTROL ACT  
Chapter 70-862  
Laws of Florida, 1970

An act authorizing the board of county commissioners of Palm Beach county to create an environmental control board; providing for the organization of said board, and the qualifications and terms of office of the members of said board; declaring the intent and purpose of the act; establishing an environmental hearing control board; providing for the organization of said hearing board, and the qualifications and terms of office of members of said board; providing for appointment of an environmental control officer; establishing the duties and powers of said environmental control officer; defining certain words and phrases used in the act; providing prohibitions against environmental degradation; making violation of the act and rules and regulations adopted pursuant to the act a misdemeanor; making refusal to obey an order of the hearing board subject to prosecution in civil court; providing remedies and penalties for violations of the act; providing for appeals from actions or decisions of the hearing board; authorizing the board of county commissioners to budget and expend funds for environmental control; establishing a service fee system and budget category for monies received therefrom; providing for severability of invalid portions of the act; providing for liberal construction of the act; providing for effective date.

Be It Enacted by the Legislature of the State of Florida:

Section 1. Short title.-This act may be known as the "Palm Beach County Environmental Control Act."

Section 2. Declaration of legislative intent.-The legislature finds and declares that the reasonable control of activities which are causing or may cause pollution or contamination of the environment may be necessary for the protection and preservation of the public health, safety and general welfare. It is the intent and purpose of this act to authorize the board of county commissioners of Palm Beach county to provide and maintain for the citizens and visitors of said county standards which will insure sanitary practice and freedom of the environment from contaminants or synergistic agents injurious to human, plant or animal life, or which unreasonably interfere with the comfortable enjoyment of life or property, or the conduct of business.

Section 3. Definitions.-The following words as used in this act shall have the following meanings:

(a) Environment shall include, but not be limited to, man's surroundings which affects human health and welfare, plant or animal life, and the reasonable enjoyment of life or property, or the conduct of business.

(b) Pollution is the presence in the environment of any one or more substances or contaminants in quantities which are or may be potentially harmful or injurious to human health



or welfare, animal or plant life, or property, or unreasonably interfere with the enjoyment of life or property.

(c) Contaminant is any substance which is harmful to plant, animal or human life.

(d) Board shall mean the Palm Beach County Environmental Control Board.

(e) Person shall be construed to include any natural person, individual, public or private corporation, firm, association, joint venture, partnership, municipality, governmental agency, political subdivision, public officer, or any other entity whatsoever, or any combination of such, jointly or severally.

Section 4. Creation of Palm Beach County Environmental Control Board.--The board of county commissioners of Palm Beach county is authorized and empowered, by resolution duly adopted, to create and establish the Palm Beach County Environmental Control Board.

Section 5. Palm Beach County Environmental Control Board; Organization.--

(a) The Palm Beach County Environmental Control Board, established pursuant to this act, shall consist of the five (5) members of the board of county commissioners.

(b) The members of the board shall annually elect a chairman and shall elect such other officers as may be deemed necessary or desirable, who shall serve at the will of the board. A majority vote of the entire membership of the board shall be necessary to take any action. Three (3) members of the board shall constitute a quorum necessary to hold a meeting and take any action. Members shall serve without compensation, but shall be reimbursed for necessary expenses incurred in the performance of their official duties. The chairman may call meetings of the board, and meetings may be called by written notice signed by three (3) members, and the board at any meeting may fix and call a meeting on a future date. Meetings will be held no less frequently than every ninety (90) days. Minutes shall be kept of all meetings of the board. All meetings shall be public.

Section 6. Environmental Control Board; duties and powers.--The board shall have the following duties, functions, powers and responsibilities:

(a) The board shall adopt, revise and amend from time to time appropriate rules and regulations necessary for the implementation and effective enforcement, administration and interpretation of the provisions of this act, and shall provide for the effective and continuing control and regulation of the environment in the county within the framework of this act. No such rules and regulations or amendments thereto shall be adopted or become effective until after a public hearing has been held by the board pursuant to notice published in a newspaper of general circulation in the county at least ten (10) days prior to the hearing. When approved by the board and filed with the clerk of the county commission, such rules and regulations



shall have the force and effect of law.

(b) The board shall adopt a budget and shall accept county or state appropriations, loans and grants from the federal government and from other sources, public or private, and monetary gifts, all of which shall be expended for the purposes of this act. The board shall establish a schedule of fees and special budget category to cover the costs of issuing permits, performing inspections, issuing variances and similar services. Moneys accumulated from such fees shall be expended for the purposes of this act and for no other purpose.

(c) The board shall make continuing studies and periodic reports and recommendations for the improvement of environmental control in the county, establish air, water and environment quality standards in the county, and work in cooperation with the Florida air and water pollution control commission, the federal water pollution control administration and the United States public health service, the Florida state board of health, and other appropriate agencies and groups interested in the field of environmental control. For the purpose of assisting the board in the responsibilities denoted in this section, the board may appoint a technical advisory board to serve at its will.

(d) The board may adopt a seal and alter it.

(e) The board shall perform such other duties, functions and responsibilities as may become necessary to contribute to improvement in the control of the environment in Palm Beach county.

Section 7. Environmental control officer.-Upon adoption of such resolution establishing an environmental control board, the county health director shall appoint an environmental control officer who shall be employed under the Florida state personnel board. The appointment shall be subject to the approval of the board. The board shall, in making any such approval, give due consideration to the qualifications and experience of said appointee in the field of environmental control, and said applicant shall be a professional engineer with experience and training in public health, duly licensed and qualified to practice in the state of Florida. Said environmental control officer shall administratively be responsible to and subject to the direct supervision of the director of the county health department.

Section 8. Environmental control officer; duties and powers.-The duties, functions, powers and responsibilities of environmental control officer shall include the following:

(a) Enforce the provisions of this act and the rules and regulations promulgated hereunder, and all rules and regulations of the Florida air and water pollution control commission pertaining to air and water pollution; and the Florida state board of health pertaining to other environmental control.

(b) Investigate complaints, study and observe environmental conditions, institute actions necessary to abate nuisances caused by violations, and institute proceedings for violations of this



act and the rules and regulations promulgated hereunder.

(c) Conduct appropriate surveys, tests and inspections to determine whether the provisions of this act are being complied with, and whether environmental control is being effectively pursued throughout Palm Beach county.

(d) Inspect property, facilities, equipment and processes operating under the provisions of this act to determine whether the provisions of this act are being complied with.

(e) Establish, operate and maintain a continuous program for monitoring the environment by means of county-wide surveillance networks designed to provide accurate data and information as to whether the provisions of this act are being complied with.

(f) Render all possible cooperation, assistance and technical advice to industry, business, institutions and governmental agencies and other interested parties in the accomplishment of the effective control of the environment.

(g) Publicize and disseminate information to the public concerning the environment and recommend methods for its control.

(h) Enlist and encourage public support, and the assistance of civic, technical, scientific and educational organizations, and the cooperation of industrial and business enterprises and organizations.

(i) Make periodic reports concerning the status of the environment in Palm Beach county and the enforcement of the provisions of this chapter, and recommendations concerning the improvement of environmental control. Such reports shall be filed with the Palm Beach county environmental control board, the state board of health and the director of the Florida air and water pollution control commission, and be made available to such other governmental agencies who may be interested.

(j) Perform such other administrative duties as may be assigned by the environmental control board.

(k) Exercise additional powers to be described hereunder.

Section 9. Hearing board; organization.-Upon appointment of an environmental control officer, the board shall appoint a three (3) member hearing board, which members shall have the following qualifications and terms of office.

(a) Members of the hearing board shall be permanent residents and freeholder electors of the county. Members of the hearing board, while serving, shall not become candidates for election to any public office, nor hold any other appointive office or position under federal, state, county or municipal government. Appointments shall be made by the board on the basis of experience or interest in the field of environmental control. The composition and representative membership of the hearing board shall be as follows:

(1) One (1) member shall be a representative of the legal profession, duly licensed and actively engaged in the practice of law in the state of Florida, who may be recommended



by the county bar association.

(2) One (1) member shall be a representative of the medical profession duly licensed and actively engaged in the practice of medicine in the state of Florida, who may be recommended by the Palm Beach county medical society.

(3) One (1) member shall be a representative of the engineering profession, duly licensed and actively engaged in the practice of engineering in the state of Florida, who may be recommended by the local chapter of the Florida engineering society.

(b) In order that the terms of office of all members shall not expire at the same time, the initial appointments to the hearing board shall be as follows: One (1) member shall be appointed for the term of one (1) year. One (1) member shall be appointed for the term of two (2) years. One member shall be appointed for the term of three (3) years. Thereafter, all appointments shall be made for the term of three (3) years. Appointments to fill any vacancy on the hearing board shall be for the remainder of the unexpired term of office. Any member who fails to attend meetings without cause for a period of ninety (90) days shall automatically forfeit his appointment and the board shall promptly fill such vacancy.

(c) The members of the hearing board shall elect a chairman. The hearing board may hold a hearing en banc or one (1) or two (2) of its members may hold a hearing. Members shall serve without compensation, but shall be reimbursed for necessary expenses incurred in the performance of their official duties. The chairman may call hearings by the board and hearings may be called by written notice signed by one (1) member of the board or signed by the environmental control officer, and the board at any hearing may fix and call a hearing on a future date. The hearing board shall convene no less frequently than every forty-five (45) days. Minutes shall be kept of all hearings by the board. All hearings shall be public. The board of county commissioners shall provide adequate and competent clerical and administrative personnel as may be reasonably required by the hearing board for the proper performance of its duties.

Section 10. Hearing board; duties and powers.-The hearing board shall have the following duties, functions, powers and responsibilities:

(a) Hear appeals by persons aggrieved by actions or decisions of the environmental control officer not already referred to the county solicitor for criminal prosecution. Consider the facts material to such appeals and render a decision promptly. Such decision may affirm, reverse or modify the action or decision appealed from, provided that such decision shall not be in conflict with the provisions of this act.

(b) Hear appeals by persons for variances to the provisions of this act. Grant, issue, deny, revoke and/or modify variances to the provisions of this act.

(c) Issue subpoenas to command the appearance of any person before a hearing at a specific time and place to be examined as a witness. Such subpoenas may require such person to produce



all books, papers and documents in his possession or under his control, material to such hearings.

(d) Issue after due public hearing, cease and desist orders to adjudged violators of the provisions of this act. Such orders shall be in the form of writs of injunction requiring the violator to refrain from a particular act.

(e) Administer oaths to any or all persons who are to testify before the hearing board.

(f) Adopt such rules for the conduct of its hearings not inconsistent with the provisions of this act.

Section 11. Appeals from actions or decisions of environmental control officer; procedure.-Any persons aggrieved by an action or decision of the environmental control officer not already referred to the county solicitor for criminal prosecution may appeal to the hearing board by filing within ten (10) days after the date of the action or decision complained of, a written notice of appeal which shall set forth concisely the action or decision appealed from and the reasons or grounds for the appeal. The hearing board shall set such appeal for hearing at the earliest possible date, and cause notice thereof to be served upon the appellant and the environmental control officer.

Section 12. Judicial review.-Any person aggrieved by any action or decision of the hearing board may seek appropriate judicial review.

Section 13. Enforcement; procedure.-

(a) Whenever the environmental control officer has received or obtained evidence that a specific violation of this act or any rules or regulations adopted pursuant to this act has been committed, the environmental control officer may notify the county solicitor of Palm Beach county of such violation. Such notice shall contain a description of the violation, the date of the violation, the location of the violation and the name and address of the violator.

(b) Upon receipt of such notice, the county solicitor shall within thirty (30) days institute proceedings in the criminal court of record for prosecution of the violation.

(c) Whenever the environmental control officer has received or obtained evidence that a violation of this act or any rules or regulations adopted pursuant to this act has been committed, and the correction of the violation requires significant technological study and that no immediate threat to human health or welfare exists because of such violation, the environmental control officer or his duly authorized agent shall issue notice to correct the violation and shall cause the same to be served upon the violator. Such notice shall set forth the nature of the violation and specify a reasonable time within which the violation shall be rectified.

(d) If the violation is not corrected within the time so specified or reasonable steps have not been taken to rectify the violation, the environmental control officer shall notify the hearing board of such non-compliance. Whereupon, the hearing board shall, within thirty (30) days of such notice, order the violator to appear before it and to show cause why remedial



action should not be taken.

(e) If after due public hearing, the hearing board upholds the violation, finds that no variance is justified and that a reasonable time has been allowed for compliance, the hearing board shall make a decision setting forth findings of fact and such conclusions of law as are required in view of the issues submitted. The decision shall contain an order for abatement framed in the manner of a writ of injunction requiring the violator to refrain from a particular act.

Section 14. Injunctive relief.-If preventive or corrective measures are not taken in accordance with any abatement order of the hearing board, or if the environmental control officer finds that a violation of the provisions of this act exists so as to create an emergency requiring immediate action to protect human health or welfare, the environmental control officer shall institute proceedings in a civil court of competent jurisdiction to enforce this act or rules and regulations or order pursuant hereto. Such injunctive relief may include both temporary and permanent injunctions.

Section 15. Violations; penalties.-

(a) It is unlawful to violate this act or the rules and regulations duly adopted pursuant to it. Such violation is deemed a misdemeanor and is punishable by a fine of not more than one thousand dollars (\$1,000) for the first offense and by a fine of not more than five thousand dollars (\$5,000) or by imprisonment not to exceed sixty (60) days for each offense thereafter. Each day during any portion of which such violation occurs constitutes a separate offense.

(b) It is unlawful to violate any duly constituted order of the hearing board. Such violation is deemed a misdemeanor and is punishable by a fine of not more than five hundred dollars (\$500) and imprisonment for not more than thirty (30) days for each offense. Each day during any portion of which such violation occurs constitutes a separate offense.

Section 16. Refusal to obey subpoena issued by the hearing board.-

(a) Whenever any person duly subpoenaed to appear and give evidence or to produce any books and papers before the hearing board neglects or refuses to appear, or to produce any books or papers, as required by the subpoena, or refuses to testify or to answer any question which the hearing board decides is proper and pertinent, he shall be deemed in contempt, and the hearing board shall report the fact to the judge of the circuit court of the district in which the person resides.

(b) Upon receipt of the report, the judge of the circuit court shall issue an order directed to the sheriff of Palm Beach county commanding the sheriff to forthwith bring such person before the judge who entered the order.

(c) On the return of the order and the production of the body of the defendant, the judge has jurisdiction of the matter. The person charged may purge himself of contempt in



the same way, and the same proceedings shall be had, and the same penalties may be imposed, and the same punishment inflicted as in the case of a witness subpoenaed to appear and give evidence on the trial of a civil cause before a circuit court of the state.

Section 17. Construction in relation to other law.-

(a) It is the purpose of this act to provide additional cumulative remedies to control the environment of this county. Nothing contained herein shall be construed to abridge or alter rights of action or remedies in equity under the common law or statutory law, criminal or civil, nor shall any provisions of this act, or any act done by virtue thereof, be construed as estopping the state or any municipality or person affected by environmental pollution, in the exercise of their rights in equity or under common law or statutory law to suppress nuisances or to abate environmental pollution.

(b) The provisions of this act do not prohibit the enactment or enforcement by any municipality of any local ordinance stricter than or identical to this act and the rules and regulations adopted pursuant to this act, which local ordinance prohibits, regulates or controls environmental pollution.

Section 18. Severability.-If any provision of this act or the application thereof to any person or circumstances, is held invalid, such invalidity shall not affect other provisions or applications of the act which can be given effect without invalid provision or application, and to this end the provisions of this act are declared severable.

Section 19. This act shall take effect upon becoming a law. July 1, 1970.



ORDINANCE NC. 70-5

AN ORDINANCE TO BE KNOWN AS THE "PALM BEACH COUNTY ENVIRONMENTAL CONTROL ORDINANCE" ADOPTING BY REFERENCE CHAPTERS 381, 386 AND 403, FLORIDA STATUTES 1969, AS AMENDED BY CHAPTERS 70-82, 70-84, 70-114, 70-139, 70-141, 70-203, 70-251, 70-270 and 70-356, LAWS OF FLORIDA 1970, AND THE RULES AND REGULATIONS OF THE FLORIDA DEPARTMENT OF AIR AND WATER POLLUTION CONTROL AND FLORIDA DIVISION OF HEALTH, AND CHAPTER 70-862, LAWS OF FLORIDA 1970, AS PART OF THIS ORDINANCE: PROVIDING FOR ENVIRONMENTAL CONTROL: PROVIDING DEFINITIONS: PROVIDING FOR APPLICABILITY OF THIS ORDINANCE AND EXCEPTIONS THERETO: PROVIDING FOR AN ENVIRONMENTAL CONTROL OFFICER, HIS POWERS AND DUTIES, ESTABLISHING AN ENVIRONMENTAL CONTROL HEARING BOARD, ITS POWERS AND DUTIES: PROVIDING FOR APPEALS FROM THE CONTROL OFFICER'S NOTICE OF VIOLATION: PROVIDING FOR HEARINGS ON RULE TO SHOW CAUSE ON NON-COMPLIANCE WITH CONTROL OFFICER'S NOTICE OF VIOLATION: PROVIDING FOR PETITIONS FOR VARIANCES AND ORDERS THEREON: PROVIDING THAT VIOLATIONS OF CHAPTER 403, FLORIDA STATUTES 1969, AS AMENDED BY CHAPTERS 70-82, 70-84, 70-114, 70-139, 70-141, 70-203, 70-251, 70-270 and 70-356, LAWS OF FLORIDA 1970, AND THE RULES AND REGULATIONS OF THE FLORIDA DEPARTMENT OF AIR AND WATER POLLUTION CONTROL PROMULGATED THEREUNDER, AND CHAPTERS 381 AND 386, FLORIDA STATUTES 1969, AND THE FLORIDA DIVISION OF HEALTH RULES AND REGULATIONS PROMULGATED THEREUNDER SHALL CONSTITUTE VIOLATIONS OF THIS ORDINANCE, PROVIDING FOR ENFORCEMENT: PROVIDING PENALTIES: PROVIDING FOR JUDICIAL REVIEW: PROVIDING FOR A FEE SERVICE SCHEDULE: PROVIDING SEVERABILITY CLAUSE AND REPEAL CLAUSE: PROVIDING FOR INCLUSION IN THE CODE OF LAWS AND ORDINANCES OF PALM BEACH COUNTY: AND PROVIDING AN EFFECTIVE DATE



WHEREAS, Chapter 70-362, Laws of Florida 1970, known as the Palm Beach County Environmental Control Act, authorizes the Board of County Commissioners of Palm Beach County, acting as the Palm Beach County Environmental Control Board, to provide and maintain for the citizens and visitors of said County standards which will insure sanitary practice and free dom of the environment from contaminants or synergistic agents injurious to human, plant or animal life or which unreasonably interferes with the comfortable enjoyment of life or property, or the conduct of business. and

WHEREAS, the protection of the total environment of Palm Beach County is necessary in the general interest of the public and to promote the general welfare. and

WHEREAS, said Act provides that the Board of County Commissioners, acting as the Palm Beach County Environmental Control Board, shall provide County standards of air, water and environment control, shall adopt rules and regulations relative to the implementation, administration and enforcement of the Act which shall have the force and effect of law, shall adopt a budget and expend monies for the purpose of the Act, shall establish a fee schedule to cover the costs of issuing permits, performing inspections, issuing variances, and other services, shall appoint an Environmental Control Officer upon the recommendation of the County Health Officer, and shall appoint a five member Environmental Control Hearing Board.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF PALM BEACH COUNTY, FLORIDA:

Section 1. This Board, acting as the Palm Beach County Environmental Control Board, pursuant to Chapter 70-362, Laws of Florida 1970, and acting under the authority vested in the Board of County Commissioners by Article VIII, Florida Constitution 1968, and Chapter 125, Florida Statutes, does hereby enact and adopt this Ordinance to be known as the Palm Beach County Environmental Control Ordinance.

Section 2. Adoption by Reference. Chapters 381 and 386, Florida Statutes 1969, and Chapter 403, Florida Statutes 1969, as amended by Chapters 70-22, 70-84, 70-114, 70-139, 70-141, 70-203, 70-251, 70-270 and 70-356, insofar as they define and prohibit offenses against the state and defined by state law as misdemeanors, and the rules and regulations of the Florida Department of Air and Water Pollution Control adopted by the Air and Water Pollution Control Board, and the rules and regulations adopted by the Florida Division of Health of the Florida Department of Health and Rehabilitative Services in effect on the date of the adoption of this Ordinance and Chapter 70-362, Laws of Florida 1970, are adopted and incorporated by reference as part of this Ordinance to the same extent and to the same effect as if the provisions of each such statute law, rule and regulation was set out in full herein, defining and prohibiting each such offense against the state to be an act prohibited by or an offense in violation of this Ordinance.

Section 3. All acts defined as misdemeanors in Chapters 381, 386 and 403 as amended by Chapters 70-22, 70-84, 70-114, 70-139, 70-141, 70-203, 70-251, 70-270 and 70-356, and all acts defined as violations of the rules and regulations of the Florida Department of Air and Water Pollution Control adopted by the Air and Water Pol-



lution Control Board and the rules and regulations adopted by the Florida Division of Health of the Florida Department of Health and Rehabilitative Services in effect on the date of the adoption of this Ordinance are hereby prohibited and declared to be violations of this Ordinance, and any person charged with such violation shall, upon conviction in the Palm Beach County Small Claims-Magistrate's Court, be punished by a fine not exceeding Five Hundred Dollars (\$500.00) or by imprisonment in the County Jail for not more than sixty (60) days for each offense, or by both such fine and imprisonment. Each day during any portion of which such violation occurs constitutes a separate offense.

Section 4. Applicability. It is hereby provided that this Ordinance shall constitute a law applicable in all the unincorporated and incorporated areas of Palm Beach County, Florida.

Section 5. Definitions. The following words and phrases when used in this Ordinance shall have the meaning ascribed to them in this section:

(a) "Persons" shall be construed to include any natural person, individual, public or private corporation, firm association, joint venture, partnership, municipality, governmental agency, political subdivision, public officer, or any other entity whatsoever, or any combination of such, jointly or severally.

(b) "Hearing Board" means the Palm Beach County Environmental Control Hearing Board.

(c) "Clerk" means the clerk of the Palm Beach County Environmental Control Hearing Board.

(d) "Control Officer" means the Palm Beach County Environmental Control Officer, or his authorized agent.

(e) "Party" includes the control officer, petitioner, respondent and any other person who has been allowed to appear in the official proceedings before the Hearing Board.

Section 6. Environmental Control Officer. The Board of County Commissioners acting as the environmental control board shall appoint an environmental control officer. The environmental control officer is hereby vested with all the powers and duties provided in Chapter 70-362, Laws of Florida 1970.

Section 7. Environmental Control Hearing Board.

(a) A Palm Beach County environmental control hearing board is hereby created and established, consisting of five members appointed by the Board of County Commissioners of Palm Beach County, acting as the Palm Beach County environmental control board. The composition of the hearing board, the terms of office, and the representative membership shall be as set out in Section 9 of Chapter 70-362, Laws of Florida 1970.

(b) No member of the hearing board shall sit in review or take any action on any matter in which he has a financial interest, either direct or indirect. No member of the hearing board shall enter into any contract with the County or transact any business in



which he has a financial interest with Palm Beach County or any person or agency acting for Palm Beach County. The Board of County Commissioners acting as the environmental control board may remove any member of the hearing board for violation of this section, or for malfeasance, misfeasance or nonfeasance, and declare a vacancy on the hearing board. A vacancy shall also be declared if a member of the hearing board fails to attend two out of three successive meetings without cause or prior approval of the chairman of the hearing board. In the event a vacancy occurs, the clerk of the hearing board shall certify the vacancy to the Board of County Commissioners, which shall appoint a person to serve the unexpired term.

(c) The hearing board shall have the powers and duties set out in Section 10 of Chapter 70-862, Laws of Florida 1970, and may adopt rules of conduct for its hearings not inconsistent with said law or this ordinance. A majority vote of the entire membership of the hearing board shall be necessary to take any action. All meetings, hearings and deliberations of the board shall be open to the public.

#### Section 8. Enforcement Procedures.

(a) The procedures set out in Sections 13 and 14 of Chapter 70-862, Laws of Florida 1970, are hereby adopted by reference as a part of this ordinance, and the control officer is authorized to enforce this ordinance, and the laws, statutes, rules and regulations adopted by this ordinance in the manner provided by law.

(b) Notice to Correct Violation. Whenever a violation of this ordinance has been committed, the control officer may issue a notice to correct the violation and cause the same to be served upon the violator by personal service or certified mail or by posting a copy in a conspicuous place on the premises of the facility causing the violation. Such notice or citation shall briefly set forth the general nature of the violation and specify a reasonable time within which the violation shall be rectified or stopped, commensurate within the circumstances. Reasonable time herein means the shortest practicable time to rectify or stop the violation.

(c) Notice of Non-compliance. Whenever a notice to correct violation has not been complied with by the violator, the control officer may file with the hearing board a notice of non-compliance. Within ten (10) days thereafter, the hearing board shall notice a hearing to be held not later than thirty (30) days after the date of the filing of the notice of non-compliance. The notice shall require the violator to appear before it and show cause why the violator should not be ordered to comply with the notice to correct violation.

(d) After due public hearing, the hearing board shall issue its order either upholding the notice to correct violation or dismissing the cause. Any order upholding a notice to correct violation shall contain an order for abatement framed in a manner of a writ of injunction, requiring the violator to refrain from the particular act charged.

(e) Appeals may be taken from such orders by any party.



Section 9. Appeals from actions or decisions of control officer. Any person aggrieved by any action or decision of the control officer may appeal to the hearing board by filing within ten (10) days after the date of the action or decision complained of, a written notice of appeal which shall set forth concisely the action or decision appealed from and the reasons or grounds for appeal. The hearing board shall set such appeal for hearing at the earliest possible date, and cause notice thereof to be served upon the appellant and the control officer. The hearing board shall hear and consider all facts material to the appeal, and render a decision promptly. The hearing board may affirm, reverse or modify the action or decision appealed from, provided that the hearing board shall not take any action which conflicts with or nullifies any of the provisions of this ordinance. The decision of the hearing board shall constitute final administrative review and no rehearing or reconsideration shall be considered. Any person aggrieved by any decision of the hearing board on an appeal shall be entitled to apply to the circuit court of Palm Beach County for a review thereof by writ of certiorari in accordance with the applicable court rules. The words "action" and "decision" as used herein shall not include the filing of any action by the control officer in any court.

In the event that the control officer files an action in any court against the same parties and the same subject matter involved in the appeal, the hearing board shall dismiss the appeal. However, if the court action is terminated without a ruling on the merits, the hearing board may reinstate the appeal upon the motion of the appellant made within fifteen (15) days of the date of the court order.

Section 10. Variances.

(a) Upon petition, the hearing board in its discretion may grant a variance from the provisions of this ordinance. Variances and renewals thereof may be granted for any one of the following reasons:

(1) There is no practicable means known or available for the adequate control of the pollution involved.

(2) Compliance with the particular requirement or requirements from which a variance is sought will necessitate the taking of measures which, because of their extent or cost, must be spread over a considerable period of time. A variance granted for this reason shall prescribe a timetable for the taking of the measures required.

(3) To relieve or prevent hardship of a kind other than those provided for in paragraphs (1) and (2) above. Variances and renewals thereof granted under authority of this paragraph shall each be limited to a period of twenty-four (24) months.

(b) No variance may be granted unless and until the petitioner has obtained all necessary approvals for the variance from the State Departments of Health and Air and Water Pollution Control.

(c) No variance may be granted from any court order or decision.



(2) Petitions for variances.

(1) A petition for variance shall be deemed to be filed on the date it is received by the clerk, accompanied by the proper filing fee. The clerk shall not accept a petition for filing unless there is attached thereto a copy of the control officer's ruling from which the variance is requested.

(2) Form of petitions. Petitions filed with the hearing board shall be typewritten or printed on a form approved by the hearing board, and the impression will be on one side of the paper only and will be doubled spaced.

(3) Contents of petition. Petitions for variances shall be sworn to and shall include:

a. The name, address and telephone number of the petitioner, and any other person authorized to receive service of notice.

b. Whether the petitioner is an individual, partnership, corporation or other entity, the names and addresses of the partners, if a partnership, the names and addresses of the officers, if a corporation, and the names and addresses of the persons in control, if other entity.

c. The type of business or activity involved in the application and the street address of same.

d. A brief description of the article, machine, equipment, process, facility or other contrivance involved in the application.

e. The facts showing why compliance with the Rule (s) complained of is unreasonable.

f. For what period of time the variance is sought and why.

g. The requirements which petitioner can meet, and the date when petitioner can comply with such requirements.

h. Whether or not any case involving the same parties, article, machine, equipment, process, facility or other contrivance is pending in any court, civil or criminal.

i. The signature of the petitioner or some person authorized to sign on his behalf.

j. A filing fee in the amount of One Hundred Dollars (\$100.00) payable to the Board of County Commissioners of Palm Beach County.

Section II. Hearings.

(a) Time for notice of hearing. Within ten (10) days after filing with the clerk of a notice of non-compliance, appeal, or petition for variance, the hearing board shall notice a hearing to be held within thirty (30) days of the filing date. Service of



notice on all parties shall be completed ten (10) days before the hearing. Hearings may be continued from day-to-day until completed.

(b) Service of notice. Service of notice of hearing may be made in person to all parties, may be served by certified mail or by publication as provided by law.

(c) Content of notice. Notice of hearing will specify date, time and exact place of hearing. Notice will specify the Rule (s) appealed from or alleged to have been violated and attached thereto shall be a copy of the notice of appeal, notice of non-compliance or petition.

(d) Preliminary matters.

(1) Dismissal. A person may dismiss his appeal or petition at any time before submission of the matter to the hearing board for decision. The clerk shall notify all parties of such dismissal.

(2) Continuances. Upon approval of a majority of the hearing board, a continuance may be granted in any hearing for good cause shown. Request for said continuance shall be filed no less than five (5) days prior to the date set for the hearing unless good cause is shown for failure to do so. All requests for continuance shall be in writing and shall state the facts which entitle the movant to the continuance.

(e) Conduct of hearings before hearing board.

(1) All hearings of the hearing board shall be open to the public.

(2) Evidence. A case may be presented by oral or documentary evidence. Oral evidence shall be taken only on oath or affirmation.

(3) The hearing board shall give probative effect to evidence which would be admissible in civil proceedings in the courts of this state, but in receiving evidence, due regard shall be given to the technical and highly complicated subject matter the control officer must handle and the exclusionary rules of evidence shall not be used to prevent the receipt of evidence having substantial probative effect. Otherwise, effect shall be given to the rules of evidence recognized in the Florida Rules of Civil Procedure.

(4) Rules of order. Unless otherwise specified by law, or otherwise provided herein, the Florida Administrative Procedure Act may be followed in the conduct of all hearings before the hearing board.

(5) Record of hearing. All proceedings of the hearing board shall be recorded by a court reporter. Proceedings will not be transcribed unless a request for transcription is made to the clerk by a party to the proceedings or a member of the hearing board. In the event a copy of a transcript is desired by a party to the proceedings, other than the control officer, county attorney, or a member of the hearing board, the cost of transcription shall be paid by said party.



The hearing board shall not permit withdrawal of evidence entered into the record so long as any issue concerned in the hearing is still pending a final decision either before the hearing board or the courts of Florida. After a final decision has been rendered, exhibits may be withdrawn at the request of the party which submitted them, or his counsel, after due notice to all parties, and upon order of the hearing board.

(f) Depositions. The testimony of any witness residing within or without the State of Florida may be taken by deposition in the manner and for the purposes provided by the Florida Rules of Civil Procedure.

(g) Judicial. In reaching a decision, judicial notice may be taken, either before or after submission of the case for decision of any fact which may be judicially noticed by the courts of Florida.

(h) Decision. The decision of the hearing board shall be in writing and within fifteen (15) days after submission of the case by the parties thereto and shall contain a brief statement of facts found to be true, the determination of the issues presented and the order of the hearing board. A copy of the decision shall be mailed or delivered to the control officer, petitioner, respondent and to every person who filed an answer or who appeared as a party at the hearing.

Section 12. Judicial Review. Any person aggrieved by any action or decision of the hearing board may seek appropriate judicial review.

Section 13. Fee Schedule. The following schedule of fees for service performed, and for administrative procedures, is hereby adopted:

(a) Environmental Sanitation Inspection:

(1)	Private water samples .....	\$ 5.00
(2)	Sanitary landfills .....	25.00
(3)	Child care centers:	
	1-15 students .....	10.00
	16-30 students .....	20.00
	31-90 students .....	30.00
	Over 90 students .....	50.00
(4)	Food service:	
	0-30 seats .....	\$25.00
	31-60 seats .....	35.00
	Over 60 seats .....	50.00
(5)	Food processing plants .....	\$25.00
(6)	Grocery and Meat markets .....	20.00
(7)	Mobile food service .....	\$25.00



- (8) Ambulances .....\$25.00
- (9) Labor camps:
  - 15-25 units .....\$15.00
  - 26-50 units ..... 25.00
  - 51-100 units ..... 50.00
  - Over 100 units .....100.00
  - 2-25 sites .....\$15.00
  - 26-50 sites ..... 25.00
  - 51-100 sites ..... 50.00
  - 100-200 sites ..... 75.00
  - Over 200 sites .....100.00
- (11) Dairy farms .....\$25.00
- (12) Milk processing plants .....\$25.00
- (13) Frozen dessert plants .....\$25.00
- (14) Milk distribution plants .....\$10.00
- (15) Nursing homes:
  - 1-25 beds .....\$25.00
  - 26-50 beds ..... 50.00
  - Over 50 beds.....per bed 1.00

(b) Air Pollution Inspection:

(1) Fuel-burning Equipment - Any article, machine, equipment or other contrivance in which fuel is burned, with the exception of incinerators, shall be assessed an annual service fee based on the design fuel consumption of the article, expressed in thousands of British Thermal Units (BTU) per hour, using gross heating values of the fuel in accordance with the following schedule:

- (a) Greater than 5,000 BTU but less than 50,000.....\$25.00
- (b) Greater than 50,000 BTU but less than 500,000.....\$50.00
- (c) Greater than 500,000 .....100.00

(2) Incinerator Equipment - Any article, machine, equipment or other contrivance designed and used primarily to dispose of combustible refuse or pathological waste by reducing the volume thereof with incineration shall be assessed an annual service fee based on the following schedule of maximum design capacity of the unit in pounds per hours:

- (a) Up to 100 pounds/hour .....\$10.00
- (b) Greater than 100 pounds/hour, but less than 1000 pounds/hour.\$25.00
- (c) Greater than 1000 pounds/hour...\$50.00

(3) Miscellaneous Equipment - Any article, machine, equipment or other contrivance not covered in the above schedules, but considered a significant source of air pollution shall be assessed an annual fee in accordance with the following schedule:



(a) Asphaltic concrete batch plants with a maximum design capacity up to 100 tons/hour .....\$25.00

Same with capacity greater than 100 tons/hour .....\$50.00

(b) Concrete batch plants, including concrete block plants.....\$25.00

(c) Foundries.....\$25.00

(d) Other.....\$25.00

(4) Stack sampling - Upon issuance of a duly executed order of the Control Officer, the following service fee shall be assessed for testing of any air pollution source:

Each sampling .....\$100.00

(c) Water Supply System Inspection:

Water supply systems within the County shall be assessed an annual service fee based upon the type of treatment facilities used, as follows:

(1) Class I - Lime soda ash softening, including coagulation, including anion and cation exchange units .....\$100.00

(2) Class II - Plants with one or more of the following units: filtration, aeration, and/or high service pumping.... 50.00

(3) Class III-Closed system plants (well pump and hydropneumatic tank)..... 25.00

(d) Wastewater Treatment Facility Inspection:

(1) Domestic wastewater treatment facilities shall be assessed an annual service fee based upon approved, designed daily flow capacity, as follows:

(a) Class I - Less than 0.050 MGD..\$25.00

(b) Class II - 0.050 MGD to less than 0.300 MGD.....\$50.00

(c) Class III - 0.300 MGD to less than 1.0 MGD.....\$75.00

(d) Class IV-- 1.0 MGD and over ...\$100.00

(2) Industrial car wash waste treatment facilities shall be assessed an annual service fee based on capacity and type of waste generated of .....\$50.00

(3) Other industrial waste treatment facilities shall be assessed an annual service fee based on capacity and type of waste generated of .....100.00



(e) Specialized Engineering Services:

Annual service fees for specialized engineering services shall be assessed as follows:

- (1) Public swimming pools.....\$25.00
- (2) Bottled water plants.....\$25.00
- (3) Laundries.....\$25.00

Section 14. Violations. It shall be unlawful and a violation of this ordinance for any person to fail or refuse to obey or comply with any provision of this ordinance. Upon conviction, such person shall be punished by a fine not to exceed Five Hundred Dollars (500.00) or by imprisonment not to exceed sixty (60) days in the County Jail, or both in the discretion of the court.

Section 15. Declaration of Legislative Intent. The provisions and penalties of this ordinance are not intended to and shall not be construed as changing, modifying, amending, repealing, superseding or conflicting with any provisions or sections of the Florida Statutes or laws defining or penalizing misdemeanors, or setting out procedures or remedies in aid of environmental control, but shall be construed as supplemental and additional thereto and not as a substitute therefor; ~~not~~ shall this ordinance be construed as impairing the jurisdiction of any court within Palm Beach County, Florida. This ordinance shall be deemed to be an alternative or additional method for Palm Beach County, its officers and agents, to effect the purposes of Chapters 381, 386 and 403, Florida Statutes, and the rules and regulations adopted thereunder.

Section 16. Parties to violations. Every person who commits, attempts to commit, conspires to commit, or aids and abets in the commission of any act declared herein to be in violation of this ordinance, whether individually or in connection with one or more persons, or as a principal, agent or accessory, shall be guilty of such offense and every person who falsely, fraudulently, forcibly, or wilfully induces, causes, coerces, requires, permits or directs another to violate any provisions of this ordinance is likewise guilty of such offense.

Section 17. Severability. If any section, sub-section, sentence, clause or provision of this ordinance is held invalid, the remainder of this ordinance shall not be affected by such invalidity.

Section 18. Inclusion in Code. It is the intention of the County Commission, and it is hereby ordained that the provisions of this ordinance shall become and be made a part of the Code of Laws and Ordinances of Palm Beach County, Florida: that the sections of this ordinance may be renumbered or relettered to accomplish such intention: and that the word "ordinance" may be changed to "section", "article" or other appropriate word.

Section 19. Effective Date. The provisions of this ordinance shall become effective upon receipt from the Florida Department of State of official acknowledgement that this ordinance has been filed with the Department of State.

Approved and adopted by the Board of County Commissioners, Palm Beach County, Florida, on October 27, 1970.

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Acknowledged by Secretary of State, State of Florida, on October 30, 1970, and filed in Office of Clerk of Circuit, November 2, 1970, 11:22 P.M.



Approved and adopted by the Board of County Commissioners, Palm Beach County, Florida, on October 27, 1970.

Acknowledged by Secretary of State, State of Florida, on October 30, 1970, and filed in Office of Clerk of Circuit Court, November 2, 1970, 1:22 p.m.

Effective Date: November 2, 1970



# LEGEND

- ① PERMANENT MONITORING STATIONS
- MAJOR EMISSION POINT SOURCES
- 1 POWER PLANT
- 2 " "
- 3 JET TEST FACILITY
- 4 AIRCRAFT POWER PLANT
- 5 ROCKET TEST FACILITY
- 6 ASPHALT PLANT
- 7 " "
- 8 " "
- 9 JUNK CAR DISPOSAL
- 10 COUNTY DUMP
- 11 MUNICIPAL DUMP
- 12 " "
- 13 " "
- 14 " "
- 15 " "
- 16 " "
- 17 " "
- 18 SUGAR MILL
- 19 " "
- 20 " "
- 21 " "
- 22 " "
- 23 " "
- 24 " "
- SUGAR CANE FIELDS

